LoadLeveler for AIX 5L and Linux

Diagnosis and Messages Guide

Version 3 Release 3

IBM

LoadLeveler for AIX 5L and Linux

Diagnosis and Messages Guide

Version 3 Release 3

Contents

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About this book

This book is designed for any user of LoadLeveler® who needs to resolve a system message and respond to that message. This book lists all of the error messages generated by the LoadLeveler software and its components and describes a likely solution for each message. Informational messages are not included.

Who should read this book

This book is designed for system programmers and administrators, but should be used by anyone responsible for diagnosing problems related to LoadLeveler. To use this book, you should be familiar with the AIX® and Linux® operating systems. Where necessary, some background information relating to AIX and Linux is provided. More commonly, you are referred to the appropriate documentation.

Conventions and terminology used in this book

Throughout the LoadLeveler product documentation:

- LoadLeveler for Linux on xSeries® and LoadLeveler for Linux on IBM® @server® with AMD Opteron processors are referred to as LoadLeveler for Linux on Multiplatform. LoadLeveler for Linux on Multiplatform includes:
  - IBM @server 325
  - IBM @server 326
  - IBM @server xSeries
  - IBM @server Cluster 1350
  - IBM @server BladeCenter™ HS20
- Note that in this document, the IBM RS/6000® SP™ systems hardware platform is referred to as the "SP." References to RS/6000 SP or SP should be read to also include currently supported IBM @server Cluster 1600 hardware.

Table 1 describes the typographic conventions used in this book.

Table 1. Summary of typographic conventions

Typographic	Usage
Bold	- **Bold** words or characters represent system elements that you must use literally, such as commands, flags, and path names. - **Bold** words also indicate the first use of a term included in the glossary.
Italic	- *Italic* words or characters represent variable values that you must supply. - *Italics* are also used for book titles and for general emphasis in text.
`Constant width`	Examples and information that the system displays appear in `constant width` typeface.
[ ]	Brackets enclose optional items in format and syntax descriptions.
{ }	Braces enclose a list from which you must choose an item in format and syntax descriptions.
|	A vertical bar separates items in a list of choices. (In other words, it means "or.")
< >	Angle brackets (less-than and greater-than) enclose the name of a key on the keyboard. For example, **<Enter>** refers to the key on your terminal or workstation that is labeled with the word Enter.

Table 1. Summary of typographic conventions (continued)

Typographic	Usage
...	An ellipsis indicates that you can repeat the preceding item one or more times.
<Ctrl-*x*>	The notation **<Ctrl-*x*>** indicates a control character sequence. For example, **<Ctrl-c>** means that you hold down the control key while pressing **<c>**.
\	The continuation character is used in coding examples in this book for formatting purposes.

Prerequisite and related information

The LoadLeveler publications are:
- *Installation Guide*, GI10-0763
- *Using and Administering*, SA22-7881
- *Diagnosis and Messages Guide*, GA22-7882

To access all LoadLeveler documentation, refer to the **IBM** @server **Cluster Information Center**, which contains the most recent LoadLeveler documentation in PDF and HTML formats. This Web site is located at:

`http://publib.boulder.ibm.com/infocenter/clresctr/index.jsp`

A **LoadLeveler Documentation Updates** file also is maintained on this Web site. The **LoadLeveler Documentation Updates** file contains updates to the LoadLeveler documentation. These updates include documentation corrections and clarifications that were discovered after the LoadLeveler books were published.

Both the current LoadLeveler books and earlier versions of the library are also available in PDF format from the IBM Publications Center Web site located at:

`http://www.ibm.com/shop/publications/order`

To easily locate a book in the IBM Publications Center, supply the book's publication number. The publication number for each of the LoadLeveler books is listed after the book title in the preceding list.

Using LookAt to look up message explanations

LookAt is an online facility that lets you look up explanations for most of the IBM messages you encounter, as well as for some system abends and codes. You can use LookAt from the following locations to find IBM message explanations for Clusters for AIX and Linux:
- The Internet. You can access IBM message explanations directly from the LookAt Web site:

  http://www.ibm.com/eserver/zseries/zos/bkserv/lookat/
- Your wireless handheld device. You can use the LookAt Mobile Edition with a handheld device that has wireless access and an Internet browser (for example, Internet Explorer for Pocket PCs, Blazer, or Eudora for Palm OS, or Opera for Linux handheld devices). Link to the LookAt Mobile Edition from the LookAt Web site.

Accessibility information

Accessibility information for IBM products is available online. Visit the IBM Accessibility Center at:

http://www.ibm.com/able/

To request accessibility information, click **Product accessibility information**.

How to send your comments

Your feedback is important in helping us to produce accurate, high-quality information. If you have any comments about this book or any other LoadLeveler documentation:

- Send your comments by e-mail to: mhvrcfs@us.ibm.com

  Include the book title and order number, and, if applicable, the specific location of the information you have comments on (for example, a page number or a table number).

- Fill out one of the forms at the back of this book and return it by mail, by fax, or by giving it to an IBM representative.

To contact the IBM cluster development organization, send your comments by e-mail to: cluster@us.ibm.com

Summary of changes

The following sections summarize changes to the LoadLeveler product and LoadLeveler library for each new release or major service update for a given product version. Within each book in the library, a vertical line to the left of text and illustrations indicates technical changes or additions made to the previous edition of the book.

Changes to LoadLeveler for this release include:

- **New information:**
  - On the Linux platforms currently available for LoadLeveler for Linux 3.2, IBM intends to provide the following functions:
    - Increased job launch flexibility and processing options
    - Backfill preemption, except for suspend method
    - Reservation
    - Additional control over scheduling including a new command and API to start the scheduling process and the ability to set job system priority

    This function is planned to be available on LoadLeveler for Linux in third quarter 2005. All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.
  - LoadLeveler provides job launch enhancements with increased flexibility and processing options:
    - Administrators may define a number of LoadLeveler starter processes to be ready and waiting to handle job requests. Having this pool of ready processes reduces the amount of time LoadLeveler needs to prepare jobs to run.
    - Both administrators and users have more control over how environment variables are copied for a job. Reducing the number of environment variables LoadLeveler has to copy reduces the amount of time LoadLeveler needs to prepare jobs to run.
  - LoadLeveler allows authorized users to make reservations, which specify a time period during which specific node resources are reserved for exclusive use by particular users or groups. Normally, jobs wait to be dispatched until the resources they require become available. Through the use of reservations, wait time can be reduced because the jobs have exclusive use of the node resources as soon as the reservation period begins. A reservation also may be used to run a workload that needs to start or finish at a particular time.
  - The LoadLeveler backfill scheduler allows jobs to be preempted so that a higher priority job step can run. Previously, this capability was available only under the gang scheduler. With the backfill scheduler, administrators may specify not only preemption rules for job classes, but also the method that LoadLeveler uses to preempt jobs.
  - LoadLeveler allows the staging of executables for checkpointable job steps. When the job step is started, the executable is copied to a specified directory on the node running the master task.
  - LoadLeveler allows administrators to specify a fixed system priority for a job step. The LoadLeveler central manager will not change this priority when it recalculates job priorities.

- – LoadLeveler allows administrators to specify a system priority threshold such that job steps can run only when their system priorities are higher than the threshold.
- – LoadLeveler allows administrators more control over the scheduling process. Normally, the LoadLeveler central manager automatically runs a scheduling algorithm at intervals specified in the configuration file. Now administrators can configure the central manager so that it runs the scheduling algorithm only when specifically instructed through the **llrunscheduler** command or **ll_run_scheduler** subroutine.
- – LoadLeveler allows administrators to set up file system monitoring for inodes, in addition to the previous monitoring for space. File system monitoring space thresholds are now specified in bytes rather than blocks, and both space and inode thresholds accept metric prefixes such as K, M and G.
- – On AIX systems with device drivers and network adapters that support remote direct-memory access (RDMA), communication protocols may provide bulk transfer as a mechanism to optimize communication. LoadLeveler supports bulk data transfer for jobs that use either the Internet or User Space communication mode.
- – On AIX systems, LoadLeveler adds a job key to both AIX and LoadLeveler accounting records. This addition allows AIX and LoadLeveler accounting records to be correlated.
- – On AIX systems, LoadLeveler adds a configuration file keyword to support the AIX Workload Manager (WLM) enforcement of an absolute memory limit for a WLM class.
- – LoadLeveler Version 3 Release 3 runs on AIX 5.3 as well as AIX 5.2.

Chapter 1. Error logging facility

> **Linux notes**
> This chapter applies to AIX 5L™ only.

LoadLeveler performs error recording by using the AIX error logging facility.

Error logging overview

Subsystems that perform a service or function on behalf of an end user often need to report important events (primarily errors). Because these subsystems cannot communicate directly with the user, they write messages to persistent storage. This process is called error logging, and the logged information is used for debugging.

LoadLeveler uses AIX error log facilities to report events on a per-machine basis. The AIX error log should be the starting point for diagnosing system problems. For more information on AIX error log facilities, see *AIX General Programming Concepts: Writing and Debugging Programs*.

Error log reports include a "DETECTING MODULE" string, which contains information identifying the exact point from which a specified error was reported (for example, software component, module name, module level, and line of code or function). The DETECTING MODULE string's format depends on the user's particular logging facility. For example, the AIX Error Log facility information appears as:

```
DETECTING MODULE
LPP=LPP name Fn=filename SID_level_of_the_file L#=Line number
```

What events are recorded

The LoadLeveler error logging facility records the following events:
- A LoadLeveler daemon fails its initial start up
- LoadLeveler is improperly customized
- The **LoadL_master** detects a crashing daemon
- A daemon changes state

Viewing LoadLeveler error log reports

Enter the following command to view a machine's LoadLeveler error reports:

```
errpt -a -N LoadLeveler
```

Clearing all LoadLeveler error log entries

Enter the following command to clear all of a machine's LoadLeveler error log entries:

```
errclear -N LoadLeveler 0
```

Error notification

You can use the AIX Error Notification Facility to notify you of a LoadLeveler error when it occurs. This facility will perform an ODM method defined by the

administrator when a particular error occurs or a particular process fails. *AIX General Programming Concepts: Writing and Debugging Programs* explains how to use the AIX Error Notification Facility.

How error log events are classified

Each error report begins with the error's label; every label has a suffix which categorizes each error by type (for example, unknown). Table 1 shows each error log suffix, what type of error the suffix implies, and a brief description of what this means to the user.

Table 2. LoadLeveler error label suffixes mapped to AIX error log

Error label suffix	AIX error log error type	AIX error log description
ER	PERM	There can be no recovery from this condition. A permanent error occurred.
ST	UNKN	It is not possible to determine the severity of the error.

Sample error log

The following is a sample LoadLeveler error report:

```
LABEL:          LL_CRASH_ER
IDENTIFIER:     FDD5FA3A

Date/Time:      Fri Mar 18 10:39:51 2005
Sequence Number: 344133
Machine Id:     000019804C00
Node Id:        c94n13
Class:          S
Type:           PERM
Resource Name:  LoadLeveler

Description
Abnormal daemon termination

Probable Causes
Deamon received a signal

Failure Causes
Daemon coredump

        Recommended Actions
        Examine LoadLeveler logs for details
        Examine resulting coredump
        Call IBM service

Detail Data
DETECTING MODULE
File:DaemonProcess.C, SCCS:1.3, Line:189
DIAGNOSTIC EXPLANATION
The LoadL_startd (process 23772) died.
```

Figure 1. Sample LoadLeveler error log

Possible causes for LoadLeveler errors

Table 3 on page 3 contains 13 common error labels; for each error label, the table provides: a description of the symptom, a list of likely causes, and the appropriate user response.

Table 3. Possible causes for LoadLeveler failure

Label:	LL_START_ER
Error Type:	
	PERM
Diagnostic Explanation:	
	LoadL_master owner must be root, and set-user-id bit set. Exiting.
	Explanation:
	The ownership and permissions of the **LoadL_master** file are incorrect.
	Cause: This error occurs for one of the following reasons: • The **LoadL_master** file is not owned by the root user • The **LoadL_master** file does not have Set User ID permission (the **-s** flag)
	Action: Perform the following actions: • Issue the command: **chown root LoadL_master** • Issue the command: **chmod u+s LoadL_master** • Restart LoadLeveler
Label:	LL_START_ER
Error Type:	
	PERM
Diagnostic Explanation:	
	This machine is not in the machine list. Exiting.
	Explanation:
	You attempted to start LoadLeveler on a machine that is not defined in the **LoadL_admin** file, and **MACHINE_AUTHENTICATE = TRUE** is set in the **LoadL_config** file.
	Action: Do one of the following: • Define the machine in the **LoadL_admin** file • Set **MACHINE_AUTHENTICATE = FALSE** in the **LoadL_config** file Then, restart LoadLeveler on the machine where the problem occurred.
Label:	LL_DAEMON_ST
Error Type:	
	UNKN
Diagnostic Explanation:	
	START_DAEMONS flag was set to *value*. Exiting.
	Explanation:
	LoadL_master could not start the LoadLeveler daemons.
	Cause: The **START_DAEMONS** keyword was not defined, or was set to **False**.
	Action: Set **START_DAEMONS = true**.

Table 3. Possible causes for LoadLeveler failure (continued)

Label: LL_START_ER
Error Type:
        PERM
Diagnostic Explanation:
        keyword not specified in config file. Exiting.
 	
        Explanation:
                The specified keyword is not defined correctly.
        Cause: This error occurs for one of the following reasons:
                • The keyword value is equal to a blank
                • The keyword is misspelled
                • The keyword is commented out
                • The keyword is missing
        Action: Define the keyword correctly.

Label: LL_START_ER
Error Type:
        PERM
Diagnostic Explanation:
        keyword=value cannot execute
 	
        Explanation:
                LoadLeveler was unable to execute the specified keyword (binary).
        Cause: This error occurs for one of the following reasons:
                • The binary does not have execute permission
                • The binary name was misspelled
                • The binary does not exist
        Action: Correct the problem, then reissue the keyword.

Label: LL_FILE_IO_ER
Error Type:
        PERM
Diagnostic Explanation:
        Cannot open file *filename*
 	
        Explanation:
                LoadLeveler was unable to open the specified file.
        Cause: This error occurs for one of the following reasons:
                • Incorrect permissions are set for the file
                • The file does not exist
        Action: Correct the problem with the file.

Label: LL_CRASH_ER
Error Type:
        PERM
Diagnostic Explanation:
        The *daemon_name* (process *pid*) died
 	
        Explanation:
                The specified daemon died.
        Cause: This error occurs for one of the following reasons:
                • The daemon received a signal
                • The daemon experienced an unrecoverable error
        Action: Examine the LoadLeveler error logs for more information.

Table 3. Possible causes for LoadLeveler failure (continued)

Label: LL_DAEMON_ST
Error Type:
         UNKN
Diagnostic Explanation:
         Started *daemon_name*, pid and pgroup=*pid*
 	
         Explanation:
                  The specified daemon started.
         Action: None. This is an informational message.

Label: LL_DAEMON_ST
Error Type:
         UNKN
Diagnostic Explanation:
         Received SHUTDOWN command.
 	
         Received RECONFIG command.
 	
         Explanation:
                  LoadL_master received the specified commands.
         Cause: The **llctl** command was issued with either the **stop**, or the **reconfig**
                  keyword.
         Action: None. This is an informational message.

Label: LL_CMR_ST
Error Type:
         UNKN
Diagnostic Explanation:
         Alternate central manager *cent_manager* will become active central manager.
 	
         Explanation:
                  LoadLeveler performed central manager recovery.
         Cause: The backup central manager was unable to contact the primary central
                  manager.
         Action: Examine the LoadLeveler error logs and the administrator mail for more
                  information.

Label: LL_CMR_ST
Error Type:
         UNKN
Diagnostic Explanation:
         Alternate central manager *cent_manager* will return to stand-by state.
 	
         Explanation:
                  LoadLeveler performed central manager recovery.
         Cause: The backup central manager gave control back to the primary central
                  manager.
         Action: None. This is an informational message.

Table 3. Possible causes for LoadLeveler failure (continued)

Label: LL_CMR_ST
Error Type:
         UNKN
Diagnostic Explanation:
         machine is unable to serve as alternate central manager.

   Explanation:
             The specified machine cannot be the alternate central manager because
             the appropriate negotiator keyword is either defined incorrectly, or not
             defined for this machine.
   Cause: The specified machine was defined as the central manager.
   Action: Define the appropriate keywords.

Label: LL_FILE_IO_ER
Error Type:
         PERM
Diagnostic Explanation:
         Status file I/O error occurred in execute directory.

   Explanation:
             An error occurred while accessing the Status file.
   Causes:
             Incorrect permissions set for file.

             Incorrect permissions set for directory.
   Action: Examine the LoadLeveler logs for details. Correct the problem with the
             file.

Chapter 2. Problem determination and resolution procedures

Related documentation

1. *LoadLeveler: Using and Administering*. The following sections contain useful information for diagnosing problems:
   - *Troubleshooting*
   - *LoadLeveler interfaces reference* - contains information on command syntax and valid keyword values
2. *LoadLeveler: Installation Guide*:
   - *Starting LoadLeveler* - includes some problem diagnosis information and mentions sample jobs which can be used to verify the configuration.
   - *Troubleshooting - why won't LoadLeveler start* - provides checks the administrator can perform to identify reasons why LoadLeveler does not start, and indicates how to obtain additional messages from **LoadL_master** which will help diagnose the problem.
3. *Using Job Switch Resource Table Services* of the *PSSP: Administration Guide*, which describes the Job Switch Resource Table (JSRT).
4. *Diagnosing Job Switch Resource Table Services problems* of the *PSSP: Diagnosis Guide*, which describes problem determination and resolution procedures for the Job Switch Resource Table (JSRT).
5. *Switch Network Interface for eServer pSeries High Performance Switch Guide and Reference*, which describes the NTBL services and related error messages.
6. *Managing and using SP security services* of the *PSSP: Administration Guide*, which describes SP security services.
7. *Understanding and Administering Cluster Security Services* in *RSCT for AIX 5L: Administration Guide*, which describes how to administer cluster security services for an RSCT peer domain.
8. *http://www.myri.com/scs*

   Refer to the Myrinet Web site to download Myrinet software and to access Myrinet documentation.

Requisite function

TCP/IP is used to provide communication between LoadLeveler daemons.

LoadLeveler optionally uses the following:
- The LoadLeveler command, **llextRPD**, uses the Resource Monitoring and Control (RMC) API to extract information from the Reliable Scalable Cluster Technology (RSCT) peer domain.
- LoadLeveler, when running on an SP, uses the Job Switch Resource Table and associated APIs, provided as the ssp.st component of PSSP, to manage switch resources.
- The LoadLeveler command, **llextSDR**, accesses the System Data Repository (SDR) using associated APIs provided in PSSP, to extract information from the SDR.
- When running DCE, LoadLeveler uses SP Security Services.
- LoadLeveler uses the cluster security services component of RSCT.

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Error information

The primary sources of error information elicited from LoadLeveler are:

- LoadLeveler log files
- Output to standard output and standard error from LoadLeveler commands and APIs
- Mail notification to the LoadLeveler user or administrator
- AIX error log files

The following sections give detailed information on these error conditions, including information on transient error data warnings.

LoadLeveler log files

Error information
LoadLeveler log files.

Description
Messages indicating what the daemon or process is doing and when that processing is occurring, using timestamps. This includes what transactions being received from and sent to other daemons or processes, and indication of error conditions encountered. Indication of transactions sent to daemons as a result of invoking LoadLeveler commands are also included in the daemon logs.

Scope
There is a separate log for each LoadLeveler daemon and for each of the starter processes on each machine in the LoadLeveler cluster. The starter logs are appended with the process ID of the starter process and exist as long as the starter processes are running. Upon each job's termination, the individual starter logs are appended to a single starter log.

Transient error data warnings
Files are copied to .old such that data will eventually be lost, and there is no "warning" to the administrator when data in the logs are about to wrap, and when a recent log is copied to the .old file, overwriting any existing .old file. The **SAVELOGS** keyword can be used to archive log files, instead of overwriting them.

For additional information on saving log files, see the topic *Configuring recording activity and log files* in the *Configuring the LoadLeveler environment* chapter of *LoadLeveler: Using and Administering*.

Tips for use
See the topic *Configuring recording activity and log files* in the *Configuring the LoadLeveler environment* chapter of *LoadLeveler: Using and Administering* for how to control log file contents and maximum size information. You can find a job step by name in the logs by using the vi editor and looking for JOB_START or other job states.

Translation warnings
LoadLeveler log files are not translated.

Output to standard output and standard error from LoadLeveler commands or APIs

Description

LoadLeveler commands write messages to the standard output and standard error file descriptors. The APIs will not write to standard output and standard error unless the error is severe. If more information is needed during the execution of an API, you can set the LLAPIERRORMSGS environment variable to **yes** in the environment that is invoking the API. Messages written to standard output are generally informational, while those written to standard error generally identify and provide information about a problem encountered while executing the command or API call.

Scope

The messages are limited in scope to the execution of the command or API call.

Mail notification to the LoadLeveler user about job steps

Description

Jobs can be submitted to request that e-mail be sent to a specified user whenever a job step starts, completes, or incurs error conditions, or to request that no e-mail is sent. The e-mail includes the specific date and time that the job step started, completed or encountered an error. Upon job step completion, the exit status returned from the job is included in the notification e-mail.

Scope

Notification of job step start, completion or error condition for a particular job step to a specified userid.

Mail notification to the LoadLeveler administrators

Description

LoadLeveler will automatically send e-mail to the list of administrator ids specified in the LoadLeveler global configuration file to notify of error conditions in the LoadLeveler cluster.

Scope

Notification is limited to a given LoadLeveler cluster and its administrators.

AIX error log

Description

See Chapter 1, "Error logging facility," on page 1 for a discussion of AIX error logs.

Scope

Specific errors recorded by LoadLeveler, as documented in Chapter 1, "Error logging facility," on page 1.

Dump information

LoadLeveler daemon dumps leave core files in **/tmp** named "core". On Linux, the name of a core file is either "core" or "core.*nnnn*", where *nnnn* is a string of digits representing the process ID of the associated core file. LoadLeveler command dumps leave core files in the present working directory. Subsequent core dumps will overwrite an existing core file. This is particularly likely in **/tmp**. For this

reason, if a core dump is encountered, it is a good idea to copy the file to another directory, preserving or noting its time of creation. You can preserve the original time and date by using the **-p** option on the copy command.

You can specify alternate directories to contain core files for the different LoadLeveler daemons and processes using the following LoadLeveler configuration file keywords.
>   MASTER_COREDUMP_DIR
>   NEGOTIATOR_COREDUMP_DIR
>   SCHEDD_COREDUMP_DIR
>   STARTD_COREDUMP_DIR
>   GSMONITOR_COREDUMP_DIR
>   KBDD_COREDUMP_DIR
>   STARTER_COREDUMP_DIR

Note: When specifying core file directories, you must ensure that the access permissions are set so that the LoadLeveler daemon or process can write to the core file directory. The simplest way to be sure that the access permissions are set correctly is to make them the same as they are for the **/tmp** directory.

See the topic *Specifying file and directory locations* in the *Configuring the LoadLeveler environment* chapter of *LoadLeveler: Using and Administering* for additional information on core dump directory keywords.

Missing dump data warnings

A core file may not be able to be written, or written completely, if the directory becomes full. This can happen easily to **/tmp** if many programs are writing to **/tmp** or if excessive data is saved to **/tmp**. If LoadLeveler cannot write the core file to **/tmp** for a daemon core dump, no core file is saved. For keywords allowing you to specify directories other than **/tmp**, see "Dump information" on page 9.

On Linux, a core file is not generated when a LoadLeveler daemon terminates abnormally, unless you run the daemons as **root** or change the default kernel core file creation behavior of setuid programs.

Although a LoadLeveler daemon begins its existence as a **root** process, it uses the system functions seteuid() and setegid() to switch to effective user ID of **loadl** and effective group ID of **loadl** immediately after start up if the file **/etc/LoadL.cfg** is not defined. If this file is defined, the user ID associated with the **LoadLUserid** keyword and the group ID associated with the **LoadLGroupid** keyword are used instead of the default **loadl** user and group IDs.

On Linux systems, unless the default kernel runtime behavior is modified, the standard kernel action for a process that has successfully invoked seteuid() and setegid() to have a different effective user ID and effective group ID is not to dump a core file. So, if you want Linux to create a core file when a LoadLeveler daemon terminates abnormally, you must use the file **/etc/LoadL.cfg** to set both **LoadLUserid** and **LoadLGroupid** to **root**.

On Red Hat® Enterprise Linux 3.0 systems, the command:
```
sysctl -w kernel.core_setuid_ok=1
```

can be used to change the default kernel core file creation behavior of setuid programs. If the **core_setuid_ok** option is enabled, the values of **LoadLUserid** and

LoadLGroupid in the **/etc/LoadL.cfg** file do not have to be **root** for the successful creation of LoadLeveler core files. In addition, core files may not be dumped if the limit for the core file size is set to zero. This can be confirmed by issuing the command:

```
ulimit -c
```

If the returned core file size is 0 (zero), issue the following command to remove the restriction on the core file size:

```
ulimit -Sc unlimited
```

Alternatively, the soft core limit can be set up in **/etc/security/limits.conf** by adding the following line:

```
#* soft core unlimited
```

Error data translation warnings

LoadLeveler daemon logs are not translated.

Trace information

The content of LoadLeveler daemon and process log files can be controlled by the LoadLeveler administrator by specifying debug control statements in the local and global configuration files. The debug control statements contain debug flags which tell LoadLeveler what type of output to include in the specified log file. For additional information, see the topic *Configuring recording activity and log files* in the *Configuring the LoadLeveler environment* chapter of *LoadLeveler: Using and Administering*.

Trace data translation warnings

LoadLeveler logs are not translated.

Information to collect prior to contacting IBM Service

Having the following information ready before calling IBM Service will help to isolate problem conditions.

- A description of the problem or failure, and an indication of what workload was occurring when the problem or failure occurred
- The level of LoadLeveler installed. On AIX, use **lslpp -h** *fileset_name*. On Linux, use **rpm -qa | grep LoadL** to determine the level of LoadLeveler installed. If different levels of LoadLeveler are being run in the cluster, indicate which level is being run on each machine.
- **llctl version** output to identify level of LoadLeveler running on all machines
- The LoadLeveler configuration and administration files. If local configuration files are being used on machines that are involved in the specified problem, include them also.
- Description of configuration - **/etc/LoadL.cfg LoadL_config**, local config and **LoadL_admin** files
- The LoadLeveler daemon and process log files. These files will exist for each machine running LoadLeveler daemons. They may exist in a file system on the machine, or in a shared file system such as GPFS; their location and maximum size are configurable by the LoadLeveler administrator(s).
- Job output and error files.

- Output to standard output and standard error from LoadLeveler commands and APIs. This output must be manually re-created and saved to file.
- The core dump files from LoadLeveler daemons or commands; these will exist on the system if a daemon or command died and was able to write a core file.
- The AIX Error Log.
- Whether the LoadLeveler cluster is reading config files from a shared file system, or if the config files reside on each node. Are the **LoadL_config** files the same on each node? How about the **LoadL_admin** file?
- Is AFS® being used?
- Is DCE being used?
- Is the LoadLeveler cluster on an SP or RSCT peer domain, or on a cluster of TCP/IP-connected workstations?
- Is GPFS being used?
- Is there a switch on the SP or RSCT peer domain? If so, what kind?
- Is the problem occurring with the daemons or the commands?
- Are daemons running as expected?
- Are jobs being submitted as expected?
- Are jobs running as expected?

Diagnostic procedures

Test description

Submit a series of jobs to verify that LoadLeveler is operating properly.

Instructions for performing test

1. Configure LoadLeveler and bring up the LoadLeveler cluster.
2. Start LoadLeveler as detailed in the *LoadLeveler: Installation Guide*.
3. Check that all the expected machines are running the LoadLeveler daemons; use the **llstatus** command to do this.
4. If you intend to run parallel jobs and your LoadLeveler cluster includes an SP or RSCT peer domain with a switch, then you should verify that the machine and the adapters are configured and operating correctly by running the parallel jobs in the samples directory, **/usr/lpp/LoadL/full/samples**, (ipen0.cmd, ipcss0.cmd, uscss0.cmd). You must read the parallel job command files because a C program must be compiled to use them. Instructions are provided in the job command files.
5. If you intend to run MPICH or MPICH-GM parallel jobs on your LoadLeveler for Linux cluster, you should use the **mpich_cmp.sh** and **mpich_gm_cmp.sh** shell scripts. These shell scripts are located in the **/opt/ibmll/LoadL/full/samples/linux/llmpich** directory and are used to compile the appropriate binaries before submitting the **mpich_ivp.cmd** and **mpich_gm_ivp.cmd** job command files to LoadLeveler.

   Before using the **mpich_cmp.sh** and **mpich_gm_cmp.sh** scripts, you should first view the scripts, then edit them to match the Linux platform and MPICH version for which the binaries will be built. Appropriate instructions can be found in the script as comments.

Table 4. Diagnosis tests to run

Suite	Test	Job Command File	Test Description
Serial			
	Test1	job1.cmd	Simple serial job running a shell script in the job command file
	Test 2	job2.cmd	Checkpointing job
	Test 3	job3.cmd	Simple serial job running a compiled C program
Parallel			
	Test 4	ipen0.cmd	Parallel job using IP over en0
	Test5	ipcss0.cmd	LoadLeveler for AIX parallel job using IP over css0
	Test6	uscss0.cmd	LoadLeveler for AIX parallel job using US over css0 one task per node
	Test 7	musppacss0.cmd	LoadLeveler for AIX parallel job using US over css0 multiple tasks per node
	Test 8	mpich_ivp.cmd	LoadLeveler for Linux parallel MPICH job
	Test 9	mpich_gm_ivp.cmd	LoadLeveler for Linux parallel MPICH-GM job using the Myrinet switch

Instructions to verify test

If the jobs do not run, then use **llq -s** to find out why. See the "Troubleshooting" appendix in *LoadLeveler: Using and Administering*. If the jobs do run, use **llq** to monitor their status. When the jobs have completed, inspect output and error files from the jobs; see the job command files for where the output and error files will be written.

Actions to take if test failed

If the jobs did not run or if they ran but terminated with a nonzero exit code, see "Troubleshooting" appendix in *LoadLeveler: Using and Administering*. If the problem persists, then contact IBM Service.

Chapter 3. LoadLeveler messages

2512 Error messages

2512-001   **Cannot chdir to** *directory_type* **directory,** *directory_name* **on** *hostname*. **uid=***uid* **errno=***error number*.

Explanation: The **chdir** system call failed for the specified directory.

User Response: Verify that the directory exists, and that the user has permission to access it.

2512-002   **Cannot open file** *filename* **in mode** *mode name*. **errno=***error_num* [*error_msg*].

Explanation: The **open** system call failed for the specified file.

User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-003   **Cannot create the** *directory_type* **directory,** *directory_name*, **on** *hostname*. **uid=***uid* **errno=***error_num error_msg*.

Explanation: The **mkdir** system call failed for the specified directory.

User Response: Verify that the directory does not already exist, and that the user has permission to create it.

2512-004   **Cannot create pipe for** *program_name*. **errno=***error_num* [*error_msg*].

Explanation: The **pipe** system call failed.

User Response: Correct the problem indicated by the error number.

2512-005   **Open failed for file** *filename*, **errno =** *error_number*.

Explanation: The **open** system call failed for the specified file.

User Response: Verify that the directory and file exist, and that the user has permission to access them. Also ensure that the user has read permission for the history file.

2512-006   **Cannot continue.**

Explanation: An error occurred while running the specified command; the command cannot recover.

User Response: Retry the command. If the problem persists, contact IBM service.

2512-007   **LOADL_ADMIN not specified in configuration file! No administrator commands are permitted.**

Explanation: The **LoadL_config** file does not contain a list of LoadLeveler administrators. Even if DCE or cluster security services is enabled, the configuration file must contain a list of users who are to receive mail for problem notification.

User Response: Add a **LOADL_ADMIN** entry containing one or more administrator uids to the **LoadL_config** file.

2512-010   **Unable to allocate memory.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2512-016 **Unable to write file** *filename*.

Explanation: A system call to write to the specified file failed.

User Response: Verify that the file has write permissions, and that the file system containing it is not full.

2512-017 **Command transmission to LoadL_schedd on host** *hostname* **failed.**

Explanation: The command cannot contact or send data to the **LoadL_schedd** daemon.

User Response: Verify that the **LoadL_schedd** daemon is running on the specified host, and that the host can be accessed on the network.

2512-019 **Job ids must not be specified when host or user names are also specified.**

Explanation: You cannot specify job IDs with host or user names.

User Response: Specify either a job list, or a host or user list with the command.

2512-020 **Internal error:** *error* **(file:** *filename* **line:** *line_number***).**

Explanation: You cannot specify job IDs with host or user names.

User Response: Verify that the **LoadL_schedd** daemon is running on the specified host, and that the host can be accessed on the network.

2512-021 **Cannot connect to LoadL_schedd on host** *hostname*.

Explanation: The specified command could not contact the **LoadL_schedd** daemon.

User Response: Verify that the **LoadL_schedd** daemon is running on the specified host, and that the host can be accessed on the network.

2512-023 **Could not obtain configuration data.**

Explanation: The specified command cannot open or read the LoadLeveler configuration files.

User Response: Verify that all of the configuration and administration files exist, and that the user has access to them.

2512-024 **Error occurred getting cluster hostnames.**

Explanation: The specified command cannot obtain the list of hosts in the LoadLeveler cluster. The failure may be due to an error opening or reading the LoadLeveler configuration files, or to a syntax error in one of the configuration files.

User Response: Verify that all of the configuration and administration files exist, and that the user has access to them. Retry the command. if the problem persists, contact IBM service.

2512-025 **Only the LoadLeveler administrator is permitted to issue this command.**

Explanation: The specified command must be issued by a LoadLeveler administrator. The user is not listed as an administrator in the LoadLeveler configuration file.

User Response: Have an administrator issue the command, or have an administrator add the user to the LoadLeveler configuration file's **LOADL_ADMIN** list. If DCE is enabled, the user's DCE principal must be a member of the **LoadL-admin** group. If cluster security services is enabled, the user's mapped identity must be a member of the group specified by **SEC_ADMIN_GROUP**.

2512-027 **Dynamic load of** *filename* **from** *system_name* **failed. errno=***error_num* **[***error_msg***].**

Explanation: The **load** system call failed for the specified file.

User Response: Verify that the specified file has been installed in the correct directory, and that it has the correct permissions.

2512-028 **ERROR** *error* **at line** *line_num* **in file** *filename***.**

Explanation: A LoadLeveler daemon or command terminated as a result of detecting corrupted internal data.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-029 **Cannot establish UNIX domain listen socket for path,** *pathname***. errno=***error_num* **[***error_msg***].**

Explanation: The **listen** system call failed. A LoadLeveler process was attempting to listen on a UNIX® domain socket to communicate with another process.

User Response: Correct the problem indicated by the error number.

2512-030 **Cannot stat file** *filename***.**

Explanation: The **stat** system call failed for the specified file.

User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-031 **Cannot change mode on file** *filename* **to** *file permissions***.**

Explanation: The **chmod** system call failed while attempting to change permissions on the specified file.

User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-032 **Cannot open file** *filename***. errno =** *error num***.**

Explanation: The **open** system call failed for the specified file.

User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-033 **Cannot open file** *filename***.**

Explanation: The **open** system call failed for the specified file.

User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-034 **File** *file* **not found.**

Explanation: The specified file does not exist.

User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-035 **Cannot read file** *file***.**

Explanation: You do not have read access to the specified file.

User Response: Verify that the directory and file exist, and that the user has permission to access them.

2512-036 **Unable to invoke** *path***, retcode =** *code***, errno =** *errno***.**

Explanation: The specified calling program failed to invoke an installation exit routine.

User Response: Verify that the directory and file exist, and that the user has execute permission.

2512-037   **User** *username* **failed user name validation on host** *hostname*.

Explanation: A user is required to have the same UID on the host from which a command is issued and the host which receives the command.

User Response: Verify that the specified user has the same UID on all hosts in the LoadLeveler cluster including submit only machines.

2512-038   **The** *specified_option* **option and the** *specified_option* **option are not compatible.**

Explanation: The command was issued with conflicting options.

User Response: Reissue the command using at most one of these options.

2512-039   **The** *specified_option* **option is not compatible with any of the following options:** *option1, option2*.

Explanation: The command was issued with conflicting options.

User Response: Reissue the command using at most one of the options.

2512-040   **Invalid input specified:** *value* **is not valid for** *parameter*.

Explanation: A *value* that is not valid or that is out of range was specified for one of the input parameters.

User Response: Specify a valid *value* according to the LoadLeveler documentation.

2512-041   **Failed to connect to the LoadLeveler.**

Explanation: Attempted to connect to LoadLeveler and failed.

User Response: Check whether LoadLeveler is up and running. Restart LoadLeveler if needed.

2512-042   **Failed to obtain the required information.**

Explanation: Attempted to get information from LoadLeveler and failed.

User Response: Check whether LoadLeveler is up and running. Restart LoadLeveler if needed.

2512-043   **The format of character string specified (***string***) is not valid for a LoadLeveler job step.**

Explanation: A string having the format: `[hostname.]job_id.step_id` is expected.

User Response: Specify a string of the expected format.

2512-044   **Invalid value** *value* **for input** *input_command*. **Default value used.**

Explanation: A *value* that is not valid or that is out of range was specified for one of the inputs.

User Response: Specify a valid *value* according to the LoadLeveler documentation.

2512-045   **ERROR:** *error_msg*.

Explanation: An error occurred.

User Response: Take action according to the specifics of the actual error message.

2512-046   **You are not authorized to issue this command. Only the owner of the job or the LoadLeveler administrator may issue the** *command_name* **command.**

Explanation: Only the LoadLeveler administrator or the job owner can issue the command for the specified job.

User Response: Contact the job owner or LoadLeveler administrator.

Explanation: This command can only be issued by the job owner or the LoadLeveler administrator. See *LoadLeveler: Using and Administering* for more information on command permissions.

2512-047   **Version** *version_number* **of LoadLeveler for Linux does not support** *security mechanism used*.

Explanation: The security mechanism specified in the LoadLeveler configuration file is not supported.

User Response: Disable the specified security mechanism and restart LoadLeveler.

2512-048   **Version** *version_number* **of LoadLeveler for Linux does not support the** *type of scheduler specified*.

Explanation: The specified scheduler type in the LoadLeveler configuration file is not supported.

User Response: Specify a supported scheduler type and restart LoadLeveler.

2512-049   **Version** *version_number* **of LoadLeveler for Linux does not support** *product feature specified*.

Explanation: The specified product feature is not supported in this version of LoadLeveler.

User Response: Do not specify the parameters associated with this feature in your configuration file or job command file.

2512-050   **Insufficient resources to meet the request.**

Explanation: There are not enough resources in the LoadLeveler cluster to satisfy the request.

User Response: Resubmit the request using available resources.

2512-051   **This job has not been submitted to LoadLeveler.**

Explanation: The job was not submitted because of an error. This message is preceded by a message explaining the error.

User Response: Correct the error indicated in the previous message.

2512-052   **Submit Filter: rc =** *return_code*.

Explanation: The submit filter returned a nonzero exit code. The job was not submitted.

User Response: Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.

2512-053   **Unable to process the job command file (**ial*filename***) from the Submit Filter** *filter*.

Explanation: The **stat** system call failed for the filtered job command file.

User Response: Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.

2512-054   **Unable to process the job command file (**ial*filename***) from the Submit Filter** *filter*. **No output.**

Explanation: The submit filter returned an empty job command file.

User Response: Contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.

2512-055   **Unable to process the job command file** *filename* **for input, the error is:** *error*.

Explanation: This message is the result of either a failure opening the job command file, or an error running the submit filter.

User Response: Verify that the job command file exists, and that the user has permission to access it. If a submit filter is configured, then contact the LoadLeveler administrator who provided the submit filter to determine the cause of the problem.

2512-056   **Unable to process the job command file** *filename***.**

Explanation: This message is the result of either a failure opening the job command file, or an error running the submit filter.

User Response: Verify that the job command file exists, and that the user has permission to access it. If a submit filter is configured, then contact the LoadLeveler administrator who provided the submit filter to help you determine the cause of the problem.

2512-057   **Unable to process the contents of the job command file** *filename***.**

Explanation: The job command file does not contain any LoadLeveler commands. A LoadLeveler command or keyword statement must be preceded by: #@.

User Response: Correct the job command file, then resubmit the job.

2512-058   **The command file** *filename* **does not contain any queue keywords.**

Explanation: The job command file does not contain a LoadLeveler **queue** keyword. A LoadLeveler job must have at least one **queue** keyword.

User Response: Correct the job command file, then resubmit the job.

2512-059   **Unable to process the command file** *filename***. The syntax is unknown.**

Explanation: The job command file does not contain any valid LoadLeveler statements.

User Response: Correct the job command file, then resubmit the job.

2512-060   **Syntax error:** *keyword* **unknown command file keyword.**

Explanation: The specified keyword is not a valid LoadLeveler keyword.

User Response: Correct the job command file, then resubmit the job.

2512-061   **Syntax error:** *keyword = keyword_value* **unknown keyword value.**

Explanation: The specified value is not valid for this keyword.

User Response: Correct the job command file, then resubmit the job.

2512-062   **Syntax error:** *keyword = keyword_value* **takes only one keyword value.**

Explanation: More than one value was given for the specified keyword. This keyword accepts only one value.

User Response: Correct the job command file, then resubmit the job.

2512-063   **Syntax error:** *keyword = num_value* **is not a valid numerical keyword value.**

Explanation: The value given for the specified keyword is not a numeric value. This keyword requires a numeric value.

User Response: Correct the job command file, then resubmit the job.

2512-064   **Syntax error:***keyword = value* **keyword value must be greater than zero.**

Explanation: The value given for the specified keyword is not a positive number. This keyword requires a numeric value greater than zero.

User Response: Correct the job command file, then resubmit the job.

2512-065   Unable to expand job command keyword *keyword* = *keyword_value*.

Explanation: The keyword cannot be expanded using the job command file macros.

User Response: Correct the job command file, then resubmit the job.

2512-066   Unable to expand job command keyword value *keyword* = *keyword_value*.

Explanation: The specified macro, used as a keyword value, could not be expanded.

User Response: Verify that the macro is defined correctly in the job command file, then resubmit the job.

2512-067   The *keyword* statement cannot exceed *number* characters.

Explanation: The specified keyword statement, including all substitutions and expansions, cannot exceed the specified length.

User Response: Correct the job command file, then resubmit the job.

2512-068   The specified job_name of *keyword* is not valid.

Explanation: The value of the **job_name** statement is not valid. The **job_name** can only contain alphanumeric characters.

User Response: Correct the job command file, then resubmit the job.

2512-069   The specified step_name of *command_file* is not valid.

Explanation: The **step_name** of the specified keyword statement is not valid. The step name must: a) start with an alphabetic character, b) contain only alphanumeric characters, and c) cannot be **T** or **F**.

User Response: Correct the job command file, then resubmit the job.

2512-070   Invalid character(s) were specified for notify_user = *user_name*.

Explanation: The |, <, >, and ; characters are not allowed in the name of the **notify_user**.

User Response: Correct the job command file, then resubmit the job.

2512-071   network.mpi_lapi cannot be specified with any other network statements.

Explanation: If **network.mpi_lapi** is specified, it must be the only network statement.

User Response: Correct the job command file, then resubmit the job.

2512-074   The priority value is not valid: *keyword* = *keyword_value*.

Explanation: The priority value must be between 0 and 100.

User Response: Correct the job command file, then resubmit the job.

2512-075   The environment variable *environment_variable_name* is not allowed for an interactive session.

Explanation: The environment variable was detected in the user environment while trying to run an interactive job.

User Response: Unset the environment variable from the environment.

2512-076   The required keyword *keyword* was not found in the administration file.

Explanation: The specified keyword must appear in the administration file, so that LoadLeveler can process job command files.

User Response: Add the specified keyword to the administration file, then resubmit the job.

2512-077　　　**A valid class could not be found in the default class list.**

Explanation:　The resource limits specified for the job exceed the resource limits for all classes in the **default_class** list for this user.

User Response:　Take one of the following actions: a) specify a class in the job command file that satisfies the job's resource limits, b) adjust the resource limits specified in the job command file, or c) have the LoadLeveler administrator add a class capable of accepting the job to the **default_class** list for the user.

2512-078　　　**Group** *group_name* **is not valid for user** *user_name***.**

Explanation:　The group assigned to this job either excludes or does not include the user.

User Response:　Take one of the following actions: a) specify a valid group in the job command file, b) have the LoadLeveler administrator allow the user into the specified group, or c) have the LoadLeveler administrator change the default group for the user.

2512-079　　　**Class** *classname* **is not valid for user** *user_name***.**

Explanation:　The class assigned to this job either excludes, or does not include the user.

User Response:　Take one of the following actions: a) specify a valid class in the job command file, b) have the LoadLeveler administrator allow the user to use the specified class, or c) have the LoadLeveler administrator change the default class of the user.

2512-080　　　**Class** *classname* **is not valid for group** *group_name***.**

Explanation:　The class assigned to this job either excludes or does not include the group.

User Response:　Take one of the following actions: a) specify a valid class for the group, or a valid group for the class in the job command file, b) have the LoadLeveler administrator allow the group to use the specified class, or c) have the LoadLeveler administrator change the default class or default group for the user.

2512-081　　　**Account number** *num* **is not valid for user** *user_name***.**

Explanation:　The account validation program determined that the user is not permitted to use the account number specified in the job command file.

User Response:　If the default account validation program is being used, then either use an account number assigned to the user, or have the LoadLeveler administrator add the account number to the user stanza in the administration file. If an installation specific account validation program is being used, then contact the LoadLeveler administrator.

2512-082　　　**Condition code specified in the statement dependency =** *condition_code* **is not valid.**

Explanation:　The condition code in the dependency statement must be **CC_NOTRUN**, **CC_REMOVED**, or an integer value between 0 and 255.

User Response:　Correct the job command file, then resubmit the job.

2512-083　　　**The condition code integer value specified in the statement dependency =** *value* **is not within the range of 0 and 255.**

Explanation:　The condition code in the dependency statement must be **CC_NOTRUN**, **CC_REMOVED**, or an integer value between 0 and 255.

User Response:　Correct the job command file, then resubmit the job.

2512-084　　　**The expression specified in the statement dependency =** *dependency_value* **is not valid.**

Explanation:　The value for the dependency statement must contain one or more expressions of the form: *stepname operator value*. Multiple expressions must be separated by the logical operators: **&&** or **||**.

User Response:　Correct the job command file, then resubmit the job.

2512-085   **The syntax in the statement dependency =** *dependency_value* **is not valid.**

Explanation: The value for the dependency statement must contain one or more expressions of the form: *stepname operator value*. Multiple expressions must be separated by the logical operators: **&&** or **||**.

User Response: Correct the job command file, then resubmit the job.

2512-086   **The step_name in the statement dependency =** *dependency_value* **is not valid.**

Explanation: The **step_name** in the dependency statement is not valid. The step name must: a) start with an alphabetic character, b) contain only alphanumeric characters, and c) not be **T** or **F**.

User Response: Correct the job command file, then resubmit the job.

2512-087   **The step_name in the statement dependency =** *dependency_value* **was not previously defined.**

Explanation: Any **step_name** used in the dependency statement must be the name of a previously defined job step.

User Response: Correct the job command file, then resubmit the job.

2512-088   **The operator in the statement dependency =** *dependency_value* **is not valid.**

Explanation: The value for the dependency statement must contain one or more expressions of the form *stepname operator value*. Multiple expressions must be separated by the logical operators: **&&** or **||**.

User Response: Correct the job command file, then resubmit the job.

2512-089   **Syntax error: Class should not be included as part of** *keyword_value***.**

Explanation: The **class** keyword cannot be used in **requirements** or **preferences** statements.

User Response: Correct the job command file, then resubmit the job.

2512-090   **The getcwd function failed with error** *error_num***.**

Explanation: The **getcwd** system call failed when the submit process attempted to retrieve the name of the current working directory.

User Response: Consult the specified error number for more information.

2512-095   **The resource limit** *resource_identification* **is unknown.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-096   **This non-AIX version of LoadLeveler does not support check pointing.**

Explanation: Checkpointing is only supported on AIX versions of LoadLeveler.

User Response: Correct the job command file, then resubmit the job.

2512-097   **This non-AIX version of LoadLeveler does not support parallel jobs.**

Explanation: Parallel jobs are only supported on AIX versions of LoadLeveler.

User Response: Correct the job command file, then resubmit the job.

2512-101   **The executable's version of the checkpointing library can not be determined.**

Explanation: Checkpointing requires that the executable be linked with the checkpointing library.

User Response: Link edit the executable with the correct version of the checkpointing library, then resubmit the job.

2512-102   **The CkptVersion cannot be defined in the requirements keyword statement.**

Explanation: **CkptVersion** cannot be specified in the **requirements** statement. If a job command file requests checkpointing, then LoadLeveler will add **CkptVersion** to the **requirements** statement implicitly.

User Response: Remove the **CkptVersion** expression from the requirements statement, then resubmit the job.

2512-105   **The** *keyword_value* **conflicts with the Adapter = in the requirements or preferences statements.**

Explanation: A job command file cannot contain both a **network** keyword, and an **Adapter** preference, in the **requirements** statement.

User Response: The **network** keyword is the preferred method for requesting adapters. Remove the **Adapter** preference from the **requirements** statement, then resubmit the job.

2512-108   **Syntax error: node =** *keyword_value* **minimum is greater than maximum.**

Explanation: The minimum number of nodes must be less than, or equal to, the maximum number of nodes.

User Response: Correct the job command file, then resubmit the job.

2512-109   **The** *keyword* **LoadLeveler keyword is not valid for an NQS job:**

Explanation: The specified keyword is not allowed in a job command file for a job that is routed to NQS. The supported level of NQS does not have an option equivalent to this keyword.

User Response: Correct the job command file, then resubmit the job.

2512-110   **The NQS_submit keyword must be specified for class** *class_name***.**

Explanation: The specified class has **NQS_class=true**, but the class does not have the **NQS_submit** keyword, which specifies that the job be submitted to the NQS queue, in the administration file.

User Response: Have the LoadLeveler administrator correct the administration file, then resubmit the job.

2512-111   **The NQS_query keyword must be specified for class** *class_name***.**

Explanation: The specified class has **NQS_class=true**, but the class does not have the **NQS_query** keyword, which specifies the NQS queue for job monitoring, in the administration file.

User Response: Have the LoadLeveler administrator correct the administration file, then resubmit the job.

2512-112   **The NQS keyword** *keyword_value* **is missing a required value.**

Explanation: The NQS keyword requires a value.

User Response: Correct the job command file, then resubmit the job.

2512-114   **Unable to allocate** *number* **bytes of memory using malloc().**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2512-115   **Unable to connect to a schedd machine.**

Explanation: The **submit** command cannot connect to a LoadLeveler **schedd** machine.

User Response: Verify that a **LoadL_schedd** daemon is running on this machine or at least one public scheduling machine, and that the scheduling machine can be accessed on the network.

2512-116   **Unable to submit a job to the schedd machine.**

Explanation: The **submit** command either cannot connect, or cannot send the job data to a LoadLeveler **schedd** daemon.

User Response: Verify that a **LoadL_schedd** daemon is running on this machine or at least one public scheduling machine, and that the scheduling machine can be accessed on the network.

2512-117   **This check pointing job requires the CHKPT_FILE or CHKPT_DIR environment variables.**

Explanation: A parallel LoadLeveler job with user initiated checkpointing requires that the CHKPT_FILE or CHKPT_DIR environment variables be set.

User Response: Set the CHKPT_FILE variable (or both variables), then resubmit the job.

2512-118   **A job_type = parallel with checkpoint = system_initiated is not valid.**

Explanation: A parallel LoadLeveler job may not use system initiated checkpointing.

User Response: Correct the job command file, then resubmit the job.

2512-119   **Root cannot run a LoadLeveler job.**

Explanation: The root user (id = 0) is not allowed to submit a job command file to LoadLeveler.

User Response: Log on as a different user, then resubmit the job command file.

2512-120   **The directory** *directory_name* **does not exist.**

Explanation: The specified directory either does not exist, or is not accessible by the user.

User Response: Either create the directory with the proper access permissions, or change the directory specified in the job command file, then resubmit the job.

2512-121   **Syntax error:** *keyword* = *keyword_value* **invalid keyword value or it cannot be evaluated.**

Explanation: The value of the keyword contains a macro (user-defined variable) that either cannot be evaluated, or is not a valid date.

User Response: Correct the job command file, then resubmit the job.

2512-122   **Unable to get passwd entry for uid** *user_uid*

Explanation: The system call **getpwuid** failed for the specified **uid**.

User Response: Verify that the user has read access to the **/etc/passwd** file, and that the user has an entry in **/etc/passwd**.

2512-123   **The command was unable to set the built in macros.**

Explanation: LoadLeveler failed to process a macro. This message is preceded by a message describing the cause of the failure.

User Response: Correct the problem indicated by the preceding message.

2512-124   **Duplicate step names** *step_names* **are not allowed.**

Explanation: All step names in the job command file must be unique.

User Response: Correct the job command file, then resubmit the job.

2512-125   **Unable to convert** *keyword = keyword_value* **to a valid date/time format.**

Explanation: The value of the specified keyword is not a valid date/time.

User Response: Correct the date/time value in the job command file, then resubmit the job.

2512-126   **Syntax error: The keyword** *keyword* **is required in the job command file.**

Explanation: This job type requires that the specified keyword appear in the job command file.

User Response: Correct the job command file, then resubmit the job.

2512-127   **Unable to calculate the image size. The** *keyword* **keyword is in error.**

Explanation: The job's image size was not stated explicitly using the executable keyword in the job command file. LoadLeveler must be able to calculate the job's image size.

User Response: Consult the preceding message for more information on the error in the executable keyword. Correct the job command file, then resubmit the job.

2512-128   **Unable to obtain the request name to build the standard output filename.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-129   **The NQS keywords** *keyword1* **and** *keyword2* **are in conflict.**

Explanation: Two of the NQS keywords are in conflict with each other.

User Response: Correct the job command file, then resubmit the job.

2512-130   **The** *keyword* **is required in the configuration file.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-132   **The step_name** *step_name* **in the requirements statement is not being referenced in the dependency statement.**

Explanation: A requirements statement refers to a machine on which another step will run. To evaluate the requirements statement, the referenced step must run prior to the referencing step. A dependency statement within the referencing step is necessary to insure that the steps are run in the proper order.

User Response: Add a dependency statement to the referencing step, then resubmit the job.

2512-133   **The** *machine.stepname* **cannot be specified for parallel type job step.**

Explanation: The *machine.stepname* cannot be specified in the requirements statements for a parallel type job step.

User Response: Correct the job command file, then resubmit the job.

2512-134   **The** *adapter_name* **adapter cannot be requested by name. Use sn_single or sn_all.**

Explanation: A **network** keyword referenced an adapter name that was not found in the administration file. The adapter cannot be requested by name.

User Response: Use either **sn_single** or **sn_all** in the job command file, or have the LoadLeveler administration define the **network_type** or **adapter_name** in the administration file.

2512-135   For the *keyword* **keyword, maximum number of nodes requested is greater than allowed for this** *stanza_name*.

Explanation: The requested maximum number of nodes exceeds the maximum allowed by the specified administration stanza.

User Response: Either reduce the maximum number of nodes in the job command file, or have the LoadLeveler administrator increase the number allowed.

2512-136   For the *stanza_name* **keyword, the total number of tasks requested is greater than allowed for this** *keyword*.

Explanation: The requested total number of tasks exceeds the maximum allowed by the specified administration stanza.

User Response: Either reduce the total number of tasks in the job command file, or have the LoadLeveler administrator increase the number allowed.

2512-137   The number of *request_nodes* **requested nodes exceeds the number of** *requested_tasks* **requested tasks.**

Explanation: The requested number of nodes is greater than the requested total tasks.

User Response: Correct the job command file, then resubmit the job.

2512-138   **Syntax error: the** *keyword1* **and** *keyword2* **keywords are not allowed in the same step.**

Explanation: Both of these keywords are not allowed in the same job step.

User Response: Correct the job command file, then resubmit the job.

2512-141   **Syntax error: Multiple** *"keyword value"* **keywords are not allowed in a** *"keyword type"* **statement.**

Explanation: Only one of the specified keywords is allowed in the specified statement.

User Response: Correct the job command file, then resubmit the job.

2512-142   **Syntax error: Invalid Adapter operation in a** *keyword type* **statement.**

Explanation: Only the equality operator *"=="* can be used with **Adapter** in the specified statement.

User Response: Correct the job command file, then resubmit the job.

2512-143   **Syntax error: Invalid adapter name in a** *keyword type* **statement.**

Explanation: The name specified in the **Adapter** requirement is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-144   The *keyword* **keyword is not valid when the node keyword contains minimum and maximum values which are not equal to each other.**

Explanation: This keyword is not valid when the minimum and maximum values specified on the node keyword are not equal to each other.

User Response: Correct the job command file, then resubmit the job.

2512-145   The *keyword* **keyword is not compatible with min_processors and/or max_processors.**

Explanation: The keywords (**min_processor** and **max_processor**) cannot be used within the same job step that specifies the **node** keyword.

User Response: Correct the job command file, then resubmit the job.

2512-146   The *keyword* **keyword is not valid for job_type = serial job steps.**

Explanation: The specified keyword is not valid in a serial job.

User Response: Correct the job command file, then resubmit the job.

2512-147   **Job command file,** *file***, cannot be a directory.**

Explanation: This message is self-explanatory.

User Response: Specify a file that is not in the same directory as the job command file.

2512-148   **Syntax error: environment param** *parameter***.**

Explanation: The specified parameter in the environment statement is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for information about environment statement parameters.

2512-149   **Cannot create environment string.**

Explanation: LoadLeveler cannot duplicate the environment string.

User Response: This is a system error; contact IBM service.

2512-150   **Not enough available filesystem space for** *file name***. Transfer from** *host* **aborted.**

Explanation: There was insufficient system space or insufficient access rights to write transferred data sent from the specified host.

User Response: Try one of the following: 1) Check that the specified directory exists, 2) check that the specified directory is accessible to the user executing the command, 3) check that the file system contains sufficient disk space to create the file. Rerun the command. If this was not successful, 4) try to reissue the **llacctmrg** command, but specify a different history file name in a different file system; or use the **statvfs** man page to check for other possible problems. If the problem persists, contact the LoadLeveler administrator.

2512-151   **Error receiving history file from** *host***.**

Explanation: An error occurred during the file transfer.

User Response: Check the communication paths to that host. Retry the command, and if the problem persists, then contact the LoadLeveler administrator.

2512-152   **GLOBAL_HISTORY is not specified in config file and user did not specify output directory.**

Explanation: The **GLOBAL_HISTORY** directory is not specified in the LoadLeveler configuration file, and no directory was specified as a command line parameter to **llacctmrg**.

User Response: Add the directory for the global history file to the **GLOBAL_HISTORY** entry of the LoadLeveler configuration file, or specify the directory as a command parameter to **llacctmrg**.

2512-176   **Internal errors detected. Exiting.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-177   **Unable to obtain machine status information from the central manager.**

Explanation: The specified command cannot obtain information from the central manager about machines in the LoadLeveler cluster.

User Response: Verify that the central manager host is up and that the **LoadL_negotiator** is running on it.

2512-178   **No class information is available in the LoadLeveler administration file.**

Explanation: LoadLeveler cannot find class information in the administration file.

User Response: Verify that LoadLeveler is running, and that it is configured correctly.

2512-181   **No machinelist specified for purge. Command was not sent.**

Explanation: No machine names were passed to the **purge** command.

User Response: Reissue the command with the names of the **LoadL_schedd** hosts you wish to purge.

2512-182   **The keyword** *keyword* **is not valid.**

Explanation: A keyword for the **llctl** command was specified that is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for a list of valid keywords.

2512-183   **Error occurred sending** *command_name* **command to** *hostname*.

Explanation: An error occurred while sending the specified command to the specified host.

User Response: Verify that the intended host is available over the network, and that LoadLeveler is running. If necessary, contact a LoadLeveler administrator.

2512-184   **Unknown class** *class_name* **specified in classlist.**

Explanation: A class name was specified with either the **drain,** or the **resume** keyword, that does not exist within the LoadLeveler configuration.

User Response: Reissue the command with a valid class name.

2512-185   **No event name specified for capture. Command was not sent.**

Explanation: No event name was passed to the **capture** command.

User Response: Reissue the command with the name to be used to capture the event.

2512-187   **Cannot evaluate StartdAvail state.**

Explanation: LoadLeveler cannot determine if a **LoadL_startd** is in the **drain** state.

User Response: Verify that the command passes a valid host list.

2512-188   **Error allocating machine object for** *machine name*.

Explanation: LoadLeveler cannot allocate an object corresponding to the specified machine.

User Response: Verify that the command passes a nameserver-resolvable host name.

2512-189   **No schedd host was specified.**

Explanation: No schedd host name was specified when using the **purgeschedd** option of the **llctl** command.

User Response: Retry the command, but be sure to specify a **schedd** host name.

2512-190   **DCE is enabled for this LoadLeveler cluster. However,** *command_name* **is unable to determine your DCE identity. Your DCE credentials may have expired.**

Explanation: LoadLeveler cannot determine the DCE identity of the user.

User Response: Verify that the DCE credentials of the user has not expired.

2512-191   *security_method* **is enabled for this LoadLeveler cluster. The** *keyword* **of the configuration file must be assigned a value.**

Explanation: *security_method* indicates the security mechanism that is in use. When this security mechanism is used, the keyword indicated by *keyword* must be assigned a value that identifies the group.

User Response: Specify the name of the appropriate group for the value of *keyword* in the LoadLeveler configuration file.

2512-193   *security method* **is enabled for this LoadLeveler cluster. Only members of the** *security method* **group** *group_name* **are permitted to issue this command.**

Explanation: The ID issuing the command is not a member of the admin group for the security mechanism in use.

User Response: When DCE is enabled, login as a member of the DCE LoadLeveler administrative group, then reissue the command. When cluster security services is enabled, login as a member of the cluster security services LoadLeveler administrative group, then reissue the command.

2512-194   **The requested operation did not complete since the remaining lifetimes of your DCE credentials are less than 5 minutes.**

Explanation: Your DCE credentials expired before the operation could complete.

User Response: **dce_login** again to get new credentials then reissue the command.

2512-195   **Unable to determine the existence of the DCE group** *group_name* **associated with the** *keyword* **keyword.**

Explanation: LoadLeveler cannot find the DCE group name specified.

User Response: Assign a valid DCE group name to the appropriate LoadLeveler keyword then reissue the command.

2512-196   **The 64-bit interface of** *API name* **is not available when DCE is enabled.**

Explanation: This LoadLeveler API cannot be invoked from a 64-bit application when DCE is enabled.

User Response: Compile and link the application as a 32-bit application if necessary.

2512-199   *illegal option* **is an unrecognized option.**

Explanation: An unrecognized option was specified.

User Response: Reissue the command, specifying only valid options.

2512-200   **Errors encountered, processing halted.**

Explanation: LoadLeveler encountered errors while processing the command line.

User Response: Correct the reported errors, then reissue the command.

2512-201   **Unable to open the files** *file1*, *file2*.

Explanation: **lldbconvert** is either not being run in the local spool directory, or the user running the program has insufficient permissions to write in the local spool directory. LoadLeveler cannot open the specified files.

User Response: Verify that the paths are correct, and that the files have the appropriate permissions.

2512-202   **Unable to convert job** *job number*, *job name*. **Previous messages may indicate cause.**

Explanation: LoadLeveler cannot convert the specified job step from its old format to the new format.

User Response: Make a note of the job number. Earlier messages may indicate the reason for the failure.

2512-203   **Unable to store job** *job number*, *job name* **in** *queue file names* **files.**

Explanation: LoadLeveler cannot store job *job number*.

User Response: Verify that there is disk space available in the local spool directory's file system, and that the associated permissions are appropriate.

2512-204   **Cannot rename file name** *file1* **to** *file2*. **Error (***error number***) was:** *error message*.

Explanation: Cannot rename the file from string1 to string2.

User Response: Use the information in the error explanation to correct the problem.

2512-205   **The job_queue files to be converted are in** *old LoadLeveler version* **format, not in 1.3 format.**

Explanation: Spool files are not in the expected original format or in the desired format.

User Response: **lldbconvert** cannot be used. Delete or rename all spool files before bringing up the new version of LoadLeveler.

2512-206   *function* **failed for job =** *job_num* **, step =** *job_step_num*.

Explanation: LoadLeveler failed to fetch the specified job step at the XDR level. **lldbconvert** will discard an entire job if it fails to convert one of its job steps.

User Response: Make a note of the job number. If the problem persists, contact IBM service.

2512-207   **Incorrect PROC version number (***version_num***). Converting to NULL PROC.**

Explanation: **lldbconvert** cannot ascertain the version of a job step, and will try to continue processing other job steps.

User Response: Keep track of the job and job step numbers. If **lldbconvert** succeeds, issue **llq** (after you have started the new version of LoadLeveler) to see what data was lost. Also, pay attention to additional error messages issued by **lldbconvert**. If the problem persists, contact IBM service.

2512-220   **Favorjob command has not been sent to the central manager.**

Explanation: The **favorjob** command was not sent to the central manager.

User Response: Verify that the central manager host is up, and that the **LoadL_negotiator** is running on it.

2512-225   **Favoruser command has not been sent to the central manager.**

Explanation: The **favoruser** command was not sent to the central manager.

User Response: Verify that the central manager host is up, and that the **LoadL_negotiator** is running on it.

2512-229   **Only a LoadLeveler administrator is permitted to use the -s option of this command.**

Explanation: A non-administrator is attempting to specify the **-s** option of this command.

User Response: Do not use the **-s** option unless you are a LoadLeveler administrator.

2512-230   **Can not find password entry for user** *uid number*.

Explanation: A matching entry for the **uid** number does not exist in the **/etc/passwd** file.

User Response: Check the entries in the **/etc/passwd** file.

2512-231 Hold command has not been sent to the central manager.

Explanation: The **hold** command was not sent to the central manager.

User Response: Verify that the central manager host is up, and that the **LoadL_negotiator** is running on it.

2512-232 The format of character string specified (= *LoadLeveler job or job step name***) is not valid for a LoadLeveler job or job step.**

Explanation: A string having the format: *[hostname.]job_id[.step_id]* is expected.

User Response: Specify a string of the expected format.

2512-238 Length of ″**environment**″ **string must be less than 8191 bytes.**

Explanation: This message is self-explanatory

User Response: Verify that the environment string contains less than 8191 bytes.

2512-239 Syntax error: When *JCL keyword* **is specified, the** *JCL keyword* **must also be specified.**

Explanation: Both of the specified keywords are required to appear within the same job step.

User Response: Correct the job command file, then resubmit the job.

2512-240 Syntax error: ″*JCL keyword = value*″ **keyword value must be greater than or equal to the value specified for Blocking.**

Explanation: The specified keyword value must be greater than or equal to the value set for Blocking.

User Response: Correct the job command file, then resubmit the job.

2512-241 A ″**communication level**″ **can only be specified with a communication subsystem mode of US.**

Explanation: A communication level was specified in a **network** statement which did not also specify user space. Communication level is only valid on **network** statements which specify user space communication.

User Response: Either remove the communication level specification, or change the mode to user space in the job command file, then resubmit the job.

2512-243 Priority command has not been sent to the central manager.

Explanation: The **priority** command was not sent to the central manager.

User Response: Verify that the central manager host is up, and that the **LoadL_negotiator** is running on it.

2512-244 Blank space is not allowed between + or - sign and priority adjustment specification.

Explanation: There should be no blank space between the **+/-** sign and the integer specified in a priority adjustment.

User Response: Remove the blank space. For example: specify *+30*, not *+ 30*.

2512-249 No reservation list was specified. A reservation list is required with the -R option.

Explanation: The **llq -R** command was issued without a reservation list.

User Response: Reissue the command with a reservation list.

2512-250 No hostlist was specified. A hostlist is required with the -h option.

Explanation: The **llq -h** command was issued without a hostlist.

User Response: Reissue the command with a hostlist.

2512-251   **No userlist was specified. A userlist is required with the -u option.**

Explanation: The **llq -u** command was issued without a userlist.

User Response: Reissue the command with a userlist.

2512-252   **Encountered one or more errors while processing the list of reservation IDs.**

Explanation: The command encountered errors while processing the arguments of the **-R** option.

User Response: Verify that the reservation IDs associated with the **-R** option are valid.

2512-253   **The -u option and the -s option are incompatible.**

Explanation: The **llq** command was issued with conflicting options.

User Response: Reissue the **llq** command using either the **-s**, or the **-u** option (not both).

2512-254   **The *flag* option can not be used when a job list is also specified.**

Explanation: When a job list is specified with **llq**, the **-u**, **-c**, and **-R** options cannot be used.

User Response: Reissue the **llq** command specifying only a job list, or any combination of the **-u**, **-c**, and **-R** options without a job list.

2512-255   **A job list must be specified if the -s option is used.**

Explanation: The **llq -s** command was issued with no job ids.

User Response: Specify one or more job ids with the **llq -s** command.

2512-261   **The -u option can not be used when a job list has already been specified.**

Explanation: The **-u** option of the **llq** command cannot be used when a job list has already been specified.

User Response: Do not use the **-u** option when a job list has been specified.

2512-262   **Encountered one or more errors while processing the list of host names.**

Explanation: The **llq** command encountered errors while processing the arguments of the **-h** option.

User Response: Verify that the host names associated with the **-h** option are valid.

2512-263   **Encountered one or more errors while processing the list of user names.**

Explanation: The **llq** command encountered errors while processing the arguments of the **-u** option.

User Response: Verify that the user names associated with the **-u** option are valid.

2512-264   **The -c option and the -s option are incompatible.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using either the **-s** or the **-c** option, but not both.

2512-265   **No class list was specified. A class list is required with the -c option.**

Explanation: The **llq -c** command was issued without a class list.

User Response: Reissue the command with a class list.

2512-266   **Encountered one or more errors while processing the list of class names.**

Explanation: The **llq** command encountered errors while processing the arguments of the **-c** option.

User Response: Verify that the class names associated with the **-c** option are valid.

2512-267   **The -x option is not compatible with the -s, -r, or -f options.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-268   **The -s option is not compatible with the -u, -x, -r, -f, or -c options.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-269   **The -l option is not compatible with the -r, or -f options.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-270   **The -r option is not compatible with the -l, -s, -x, or -f, options.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-271   **An error was detected while processing the parameters of the -r or -f option.**

Explanation: A parameter of the **-r** or **-f** option is not valid.

User Response: Use the **llq -H** command to obtain a complete list of valid parameters of the **-r** or **-f** option.

2512-272   **The -f option is not compatible with the -l, -s, -x, or -r options.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-273   **A job list can be specified only once.**

Explanation: More than one job list has been specified.

User Response: Reissue the **llq** command with only one list of job IDs.

2512-274   **A job list can not be specified when a user list has also been specified.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command using only valid combinations of options.

2512-275   **An error was detected while processing the list of job names.**

Explanation: A job name or job step has been specified which is not valid.

User Response: Reissue the **llq** command using valid job names or job step names.

2512-277   **The -h option is compatible with a job list only when the -s option is also specified.**

Explanation: The **-h** option of the **llq** command cannot be used with a job list unless the **-s** option is also specified.

User Response: Do not use the **-h** option when a job list has been specified, unless the **-s** option is also specified.

2512-278   **A step id must be specified when the -w and -h options are specified.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command with only valid combinations of options.

2512-279   **The -w option only supports a single hostname.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command with only valid combinations of options.

2512-280   **The combination of -w and -h only supports a single step id.**

Explanation: Conflicting options were specified for the **llq** command.

User Response: Reissue the **llq** command with only valid combinations of options.

2512-281   **This operation did not terminate normally since a severe error had been detected.**

Explanation: The program has terminated due to a severe condition.

User Response: Check the LoadLeveler configuration and administration files.

2512-282   **A userlist, hostlist or joblist must be specified.**

Explanation: The **llcancel** command is missing data.

User Response: Specify a userlist, hostlist, or joblist with the **llcancel** command.

2512-283   **Cancel command has not been sent to the central manager.**

Explanation: LoadLeveler encountered an error while sending data to the central manager.

User Response: Verify that the central manager host is up, and that the **LoadL_negotiator** daemon is running on it. Retry the command; if the problem persists, then contact the LoadLeveler administrator.

2512-293   **A duplicate category associated with -f or -r option has been specified.**

Explanation: A suboption of the **-f** or **-r** option was specified more than once.

User Response: Each distinct suboption should not be specified more than once. Use the **-H** option to get a list of valid suboptions.

2512-294   **The central manager is not defined in the LoadLeveler administration file.**

Explanation: LoadLeveler cannot obtain information about the central manager machine.

User Response: Verify that a central manager is defined in the LoadLeveler administration file.

2512-295   **The -l, -r, -f options of this command are mutually exclusive.**

Explanation: Do not specify the **-l**, **-r**, or **-f** options together in any combination.

User Response: Specify **-l**, or **-r**, or **-f**, but not any combination of these options.

2512-296   **An invalid category associated with -f or -r option has been specified.**

Explanation: You have specified a non-valid suboption of the **-f** or **-r** option.

User Response: Specify only valid suboptions. Use the **-H** option to get a list of valid suboptions.

2512-297   **The arguments of this command contain characters not in the ASCII character set. Exiting.**

Explanation: The arguments of this command contain characters non-ASCII characters.

User Response: Specify arguments in valid ASCII characters.

2512-298   **The -l, -a, -r, -f, -R, -F options of this command are mutually exclusive.**

Explanation: Do not specify any of the following options together: **-l**, **-a**, **-r**, **-f**, **-R**, or **-F**.

User Response: Specify any of the following options alone: **-l**, **-a**, **-r**, **-f**, **-R**, **-F**, but not in any combination.

2512-299   **If -F option is specified then a host list can not be specified.**

Explanation: The **-F** option is not compatible with a host list.

User Response: Do not specify a host list if the **-F** option has been specified.

2512-300   **Program encountered an error while processing data received from the central manager.**

Explanation: Data that is not valid is returned by the central manager.

User Response: Check to see if the central manager is up and running.

2512-301   **An error occurred while receiving data from the daemon on host** *hostname***.**

Explanation: Data that is not valid is returned or a time-out occurred.

User Response: Use the **CLIENT_TIMEOUT** keyword to increase the time-out interval from the default value of 30 seconds.

2512-311   *parameter* **is not a valid option for the -r flag. Valid options are: all, resource, throughput,**
                 avgthroughput, minthroughput, maxthroughput, numeric.

Explanation: The specified argument is not valid for the **-r** flag.

User Response: Refer to the displayed list of valid arguments.

2512-312   **Missing date for -s or -e flag.**

Explanation: One or more dates have been omitted for the **-s** and **-e** flags.

User Response: Enter a date for each flag.

2512-313   **The date range specified is not valid.**

Explanation: The Start date is later than the End date.

User Response: Enter a valid date range.

2512-318   *parameter* **is not a valid option for the -d flag. Valid options are: all, user, group, class, account,**
                 unixgroup, day, week, month, jobid, jobname, allocated.

Explanation: The specified parameter is not a valid argument for the **-d** flag.

User Response: Refer to the displayed list of valid arguments.

2512-326   **Syntax error found in the task_geometry expression. Task ID(s) have to be specified.**

Explanation: There are no task IDs specified for a node in the **task_geometry** statement. Task IDs must be unsigned integers, specified within a single set of parentheses. Additional task IDs should be included within the same parentheses, but must be separated from each other by commas.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-327   **Syntax error found in the task_geometry expression. The expression must start with a "{".**

Explanation: The **task_geometry** statement must start with a "{" (open brace), and end with a "}" (closed brace).

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-328   **Syntax error found in the task_geometry expression. The expression must end with a "}".**

Explanation: The **task_geometry** statement must start with a "{" (open brace), and end with a "}" (closed brace).

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-329   **Syntax error found in the task_geometry expression. Extra characters are found after "}".**

Explanation: The entire **task_geometry** statement must be enclosed within the "{" (open brace), and the "}" (closed brace).

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-330   **Syntax error found in the task_geometry expression. Left parenthesis cannot be nested.**

Explanation: The list of task IDs assigned to a node in a **task_geometry** statement must begin with a single open parenthesis. Nested parentheses are not allowed.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-331   **Syntax error found in the task_geometry expression. Expected "(", but another character is encountered.**

Explanation: The list of task IDs assigned to a node must begin with the open parenthesis; the current list of task IDs begins with another character.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-332   **Syntax error found in the task_geometry expression. "(" is encountered without a corresponding ")".**

Explanation: All of the task IDs for a node in a **task_geometry** statement must be enclosed between parentheses.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-333   **Syntax error found in the task_geometry expression. Task ID(s) have to be specified within parentheses.**

Explanation: Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-334   **Syntax error found in the task_geometry expression. The specification of task ID(s) within the parentheses is not valid.**

Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-335   **Syntax error found in the task_geometry expression. A task ID has to be an unsigned integer.**

Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-336   **Syntax error found in the task_geometry expression. A task ID has to be an integer from 0 to n-1, where n is the total number of tasks for the parallel job.**

Explanation: Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero, and end with a value that is one less that the total number of tasks in the parallel job.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-337   **Syntax error found in the task_geometry expression. Duplicate task IDs are specified.**

Explanation: No task IDs may be specified more than once in the **task_geometry** statement.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-338   **Syntax error found in the task_geometry expression. A non-blank character is found between ″)″ and ″}″.**

Explanation: No task IDs can be specified more than once in the **task_geometry** statement.

User Response: Correct the syntax error in the **task_geometry** statement, then resubmit the job.

2512-339   **Syntax error: the *JCL keyword* keyword is not allowed in a step which specifies a class with the master node requirement.**

Explanation: The class which was specified for the step is configured with **master_node_requirement** set to **true**. The specified keyword cannot be used in a step that requires the master node feature.

User Response: Either modify the job command file to remove the specified keyword or to change the class specification, or modify the LoadLeveler administration file by setting the **master_node_requirement** keyword to **false** in the class stanza.

2512-340   **There is a consumable resource without a value: *value*.**

Explanation: This message is self-explanatory.

User Response: Verify the syntax of the job command file, configuration file, or administration file.

2512-341   **There is a consumable resource with a wrong value: *value*.**

Explanation: This message is self-explanatory.

User Response: Verify the syntax of the job command file, configuration file, or administration file.

2512-342   **There is a consumable resource without units: *unit*.**

Explanation: This message is self-explanatory.

User Response: Verify the syntax of the job command file, configuration file, or administration file.

2512-343   **There is a floating resource with a wrong value: *value*.**

Explanation: This message is self-explanatory.

User Response: Verify the syntax of the job command file, configuration file, or administration file.

2512-344   **Syntax error: the** *JCL keyword* **keyword is not allowed in the command file for an interactive session.**

Explanation: The job command file cannot have the specified keyword when the session is interactive.

User Response: Either, remove the specified keyword from the job command file, or submit the job with a different session type.

2512-345   **Syntax error: the** *JCL keyword* **keyword is not allowed in the command file for an interactive session with host list.**

Explanation: The job command file cannot contain the specified keyword with a host list, and when the session is interactive.

User Response: Either remove the specified keyword from the job command file, or submit the job with a different session type.

2512-346   **Syntax error: the** *keyword* **keyword cannot be specified more than once.**

Explanation: This message is self-explanatory.

User Response: Remove the additional keyword from the job command file.

2512-347   **Syntax error: the keyword** *keyword* **can not have a value** *value* **for an interactive session.**

Explanation: The job command file cannot contain the specified keyword with a host list, and when the session is interactive.

User Response: Change the value of the specified keyword in the job command file.

2512-348   **The** *keyword* **keyword is ignored in the command file for an interactive session.**

Explanation: The job command file cannot contain the specified keyword when the session is interactive.

User Response: Change the value of the specified keyword in the job command file.

2512-349   **Syntax error: the** *keyword* **keyword cannot contain a value other than** *value* **for an interactive session.**

Explanation: The job command file cannot contain the specified keyword with a host list, and when the session is interactive.

User Response: Change the value of the specified keyword in the job command file.

2512-350   **Syntax error: the** *resource name* **consumable resource can not have a value lesser than the value of "image_size".**

Explanation: The value for **ConsumableVirtualMemory** cannot be less than the value specified for the step's image_size.

User Response: Change the value of the specified keyword in the job command file.

2512-351   **Attention: The consumable resource** *resource name* **is not listed in SCHEDULE_BY_RESOURCES.**

Explanation: This warning is generated when a resource has been requested that does not appear in the **SCHEDULE_BY_RESOURCES** list.

User Response: Change the value of the specified keyword in either the job command file, or the LoadLeveler configuration file.

2512-352   **Syntax error:** *keyword = keyword value* **keyword value must be greater than zero.**

Explanation: The value given for the specified keyword is not a positive number. This keyword requires a numeric value greater than zero.

User Response: Correct the job command file, then resubmit the job.

2512-353   css1 adapter cannot be used to run User Space jobs.

Explanation: User Space jobs cannot be run on the **css1** adapter alone (css limitation).

User Response: Request the **css0** or **csss** adapter for a User Space job or specify IP Mode for **css1**.

2512-354   The ENFORCE_RESOURCE_SUBMISSION keyword is true, ENFORCE_RESOURCE_USAGE is required in the job's resources keyword.

Explanation: The admin has defined the **ENFORCE_RESOURCE_SUBMISSION** keyword to be **True**. All jobs must have the **ENFORCE_RESOURCE_USAGE** resources specified.

User Response: Resubmit the job with the correct resources requested in the **resources** keyword.

2512-355   The string *string* **associated with the resources keyword contains invalid consumable resources information.**

User Response: Resubmit the job with the correct resources specifications.

2512-356   The specification *data_string* **for** *keyword* **keyword contains invalid data.**

Explanation: The data string assigned to this keyword contains one or more errors.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-357   The value assigned to *keyword* **must be greater than zero.**

Explanation: This keyword accepts only a positive number.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-358   Syntax error found in the task_geometry expression. The value of a task ID can not be outside the range of int32_t.

Explanation: The task geometry expression contains a task ID having a value outside the (INT32_MIN,INT32_MAX) range.

User Response: Resubmit the job with the correct specification for the **task_geometry** expression.

2512-359   The character string *string* **cannot be assigned to the** *keyword* **keyword."**

Explanation: The user specification in *string* is not appropriate for this keyword.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-360   The string *string_value* **associated with the** *keyword* **keyword is not a valid time specification.**

Explanation: The user specification in *string2* is not appropriate for this keyword.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-361   The value assigned to the *keyword* **keyword can not be converted to an integer.**

Explanation: The user specification for this keyword is not a numeric string and hence cannot be converted to an integer.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-362   The value *value* **assigned to the** *keyword* **keyword can not be converted to an integer.**

Explanation: The user specification in *value* is not a numeric string and, therefore, cannot be converted to an integer.

User Response: Specify a correct value for this keyword and either resubmit the job or reconfigure LoadLeveler.

2512-363   **The stat64 function is unable to determine the status of the file** *filename***.**

Explanation: The stat64 system call failed for the specified file.

User Response: Verify that the file exists, and that it has the appropriate permissions.

2512-364   **The size of the file** *filename* **associated with the** *executable* **keyword cannot exceed** *number* **bytes.**

Explanation: The size of the file associated with the LoadLeveler executable keyword cannot be greater than the indicated number of bytes.

User Response: If the size of the executable is greater than INT32_MAX (2147483647 bytes), create a shell script that invokes this executable and submit the script to LoadLeveler.

2512-365   **The** *keyword* **statement with domain names expanded cannot exceed** *number* **characters.**

Explanation: The keyword statement, including all domain name expansions, cannot exceed the specified length.

User Response: Correct the job command file, then resubmit the job.

2512-366   **You must have execute permission for a job step's executable file,** *executable file name*, **when checkpoint is enabled.**

Explanation: LoadLeveler normally copies the executable file for a job step to the executing machine and sets execute permission for the copied file. If checkpoint is enabled for a job step, LoadLeveler cannot copy the executable file. In this case, the executable file must have execute permission for the user at submit time.

User Response: Set execute permission for the executable files for all checkpoint enabled job steps and then resubmit the job.

2512-367   **This version of llsubmit does not support** *type of LoadLeveler job*.

Explanation: The type of job submitted is not supported by this version of LoadLeveler.

User Response: Correct the job command file, then resubmit the job.

2512-368   **The** *function_name* **function is unable to determine the status of the file** *file_name*, **errno** *error_description*.

Explanation: The specified system call failed for the specified file.

User Response: Verify that the file exists and that it has the appropriate permissions.

2512-377   **The SDR Class** *classname* **class does not contain any SDR objects.**

Explanation: The specified command cannot extract any objects from the SDR class.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-378   **The SDR system partition does not contain any machine definitions.**

Explanation: The specified command cannot find SDR Node class entries for the machines in the system partition definition in the System Data Repository.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-379   **The SDR function** *function_name* **failed with a return code of** *return_code*.

Explanation: The specified command issued a function to extract data from the SDR and the SDR function failed with the specified return code.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-380   **The SDR attribute** *attribute* **was not found in the SDR class** *classname* **object.**

Explanation: The specified command could not find the attribute in the SDR class object.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-381   **An SP_NAME of** *SP_NAME* **was found. Verify that this is a valid partition.**

Explanation: The specified command could not find the partition.

User Response: Contact the system administrator to start problem determination procedures for the SDR.

2512-403   **Unable to** ″**cd**″ **into directory** *directory*.

Explanation: This message is self-explanatory.

User Response: Review access permissions and other possible reasons for not being able to access a directory.

2512-404   **You must be user** *username* **to execute this script.**

Explanation: This message is self-explanatory.

User Response: Verify that you are logged in as the expected user, then retry the script.

2512-405   **Missing parameter for** *parameter*; **try** ″**-help**″.

Explanation: This message is self-explanatory.

User Response: Issue **llinit -help** to for information on specifying parameters.

2512-406   **Unable to set permission** *permission* **on** *target file*.

Explanation: This message is self-explanatory.

User Response: Verify that you have the authorization to set the desired permissions.

2512-407   **Unable to create directory** *target directory*.

Explanation: This message is self-explanatory.

User Response: Verify that you have the authorization to create the desired directory.

2512-408   **Unable to create symbolic link** *target symbolic link*.

Explanation: This message is self-explanatory.

User Response: Verify that you have the authorization to create the desired symbolic link.

2512-409   **Unable to create file** *target file*.

Explanation: This message is self-explanatory.

User Response: Verify that the user has authorization to create the desired file.

2512-410   **Error occurred while trying to edit file** *target file*, **rc=**return from ed command*.*

Explanation: This message is self-explanatory.

User Response: Make the corrections indicated by the return code.

2512-411   Unknown parameter=*parameter* try "llinit -H".

Explanation: This message is self-explanatory.

User Response: Issue **llinit -H** for information on specifying parameters.

2512-424   A list of job names or step names must be specified when the -s option is specified.

Explanation: When **-s** option is specified, a list of job names or step names must also be specified.

User Response: Reissue the **llq -s** command with a valid list of job names or step names.

2512-425   Machine *machine_name* specified in the host list is not known to the Central Manager. Ignored.

Explanation: The machine specified is not known to the Central Manager.

User Response: Check the LoadLeveler administration file. Reissue the **llq** command with a valid host name.

2512-426   None of the machines in the specified host list is known to the Central Manager.

Explanation: The machines in the host list are not known to the Central Manager.

User Response: Check the LoadLeveler administration file. Reissue the **llq -h** command with a valid list of host names.

2512-427   Step *step_id* has been canceled because it was rejected *num* time(s).

Explanation: The number of times that the specified step was rejected exceeds the value specified for MAX_JOB_REJECT in the configuration file, so the step was canceled.

User Response: Check for mail describing this problem, unless **NOTIFICATION** is set to **NONE** in the job command file. Also, verify that the job's requirements can be met on the machine that rejected it, and that the user's uid is valid.

2512-428   Step *step_id* has been put on user hold because it has been rejected *num* time(s).

Explanation: The number of times that the specified step was rejected exceeds the maximum allowed in the job command file, so the step was put on user hold.

User Response: Check for mail describing this problem (unless the **NOTIFICATION** keyword is set to **NONE** in the job command file). Also, verify that the job's requirements can be met on the machine that rejected it, and that the user's uid is valid.

2512-429   Problem with history file.

Explanation: This is the subject line of an email sent to LoadLeveler administrators when the schedd fails to write to its local history file.

User Response: The body of the email will contain further details about the problem.

2512-430   Error appending job *job_name* to the history file, errno = *UNIX_error_num*.

Explanation: This is a history file problem.

User Response: Consult the specified error number for more information.

2512-431   Accounting has been disabled on machine: *machine_name*.

Explanation: This is a history file problem.

User Response: Use the error number from message 2512-430 to correct the history file problem.

2512-432   **Re-enable with: llctl -h** *hostname* **reconfig or llctl -h** *hostname* **recycle.**

Explanation: This is a history file problem.

User Response: If you are a LoadLeveler administrator, then run **llctl -h reconfig** or **llctl -h recycle**, then retry the command; if you are not, then contact the LoadLeveler administrator.

2512-433   *step_id* **has been put on system hold because it has been rejected** *num* **time(s).**

Explanation: The specified step was put on system hold.

User Response: Verify that the job's requirements can be met on at least one machine in the LoadLeveler cluster, and that the user's uid is valid on sufficient machines in the LoadLeveler cluster, then resubmit the job. If the problem persists, contact the LoadLeveler administrator.

2512-434   **There is an error attempting to write to the SAVELOGS directory. Saving log files is disabled.**

Explanation: An error occurred during the saving of old log files.

User Response: Verify that the configuration file variable SAVELOGS points to an existing directory, that you have permission to access the directory, and that there is available space in the directory.

2512-435   **Error appending reservation** *reservation_ID* **to the reservation history file, errno =** *errno*.

Explanation: A problem occurred appending data to the reservation history file. The error number indicates the nature of the problem.

User Response: Correct the problem indicated by the error number.

2512-436   **Reservation accounting has been disabled on machine:** *machine_name*.

Explanation: A reservation history file problem occurred.

User Response: Use the error number from message 2512-435 to correct the reservation history file problem.

2512-440   **Unable to malloc** *num* **bytes for list.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2512-441   **Specified step name** *step_name* **is not a valid name for a LoadLeveler job.**

Explanation: The error message is self-explanatory

User Response: Reissue the command specifying a correct LoadLeveler step name.

2512-442   **statvfs (***hexadecimal_address***) failed. Errno =** *error_num*.

Explanation: The **statvfs** system call failed.

User Response: Correct the problem indicated by the error number.

2512-443   **statfs (***hexadecimal_address***) failed. Errno =** *error_num*.

Explanation: The **statfs** function call failed.

User Response: Correct the problem indicated by the error number.

2512-445   **Syntax error: Blank required after end quote for keyword** *keyword***.**

Explanation: The specified keyword requires a blank after the end quote.

User Response: Correct the job command file, then resubmit the job.

2512-446   **Syntax error: Quotes mismatched for keyword** *keyword***.**

Explanation: The quotes are mismatched for the specified keyword.

User Response: Correct the job command file, then resubmit the job.

2512-448   **Syntax error: The** *keyword*_**LIMIT unit type of** *keyword_units* **is not valid.**

Explanation: The type of units in the specified keyword value is not valid

User Response: Correct the job command file, then resubmit the job.

2512-449   **Syntax error: The** *keyword*_**LIMIT =** *keyword_value* **integer value has too many digits. Maximum allowed is** *digits***.**

Explanation: The specified keyword integer value has too many digits.

User Response: Correct the job command file, then resubmit the job.

2512-450   **Syntax error: The** *keyword*_**LIMIT =** *keyword_value* **fraction value has too many digits. Maximum allowed is** *digits***.**

Explanation: The specified keyword fractional value has too many digits.

User Response: Correct the job command file, then resubmit the job.

2512-451   **Syntax error: The** *keyword*_**LIMIT =** *keyword_value* **value must be numeric.**

Explanation: The specified keyword value must be numeric.

User Response: Correct the job command file, then resubmit the job.

2512-452   **Syntax error: The** *keyword*_**LIMIT =** *keyword_value* **cannot contain a value of zero.**

Explanation: The specified keyword value must be greater than zero.

User Response: Correct the job command file, then resubmit the job.

2512-453   **Syntax error: The** *keyword*_**LIMIT value** *keyword_value* **has too many characters.**

Explanation: The specified keyword value units has too many characters.

User Response: Correct the job command file, then resubmit the job.

2512-454   **Syntax error: The time** *keyword* **format is invalid.**

Explanation: The time format in the specified keyword value is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-455   **Syntax error:** *line***.**

Explanation: The specified line in the job command file is not valid; the syntax is unknown.

User Response: Correct the job command file, then resubmit the job.

2512-456   **The** *keyword*_**LIMIT = ** *keyword_value* **soft limit of (***limit units***) exceeds user hard limit (***limit units***).**

Explanation: The soft limit in the specified keyword value exceeds the hard limit value.

User Response: Correct the job command file, then resubmit the job.

2512-457   **Unable to generate a temporary file name for stdin input file.**

Explanation: The command cannot generate a temporary file name.

User Response: Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.

2512-458   **Unable to open command file** *filename* **for output.**

Explanation: The command cannot open the specified temporary command file.

User Response: Verify that the user has valid file permissions. If the problem persists, report it to the system administrator.

2512-459   **Unable to unlink file** *filename***.**

Explanation: The command cannot delete the specified temporary command file.

User Response: Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.

2512-460   **Unable to write stdin input file to** *temp_filename***.**

Explanation: The command cannot write the **stdin** command file to the specified temporary command file.

User Response: Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.

2512-461   **Unexpectedly large line from stdin file.**

Explanation: The **stdin** command file is too large.

User Response: Correct the job command file, then resubmit the job.

2512-462   **Write error copying input command file.**

Explanation: The command could not copy the **stdin** command file to the temporary command file.

User Response: Verify that the user has valid file permissions. If the problem persists, then report it to the system administrator.

2512-465   **Syntax error: The time** *keyword_value* **contains non-numeric characters.**

Explanation: The specified time format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-466   **Syntax error: The start date must be 12 digits [YYMMDDhhmmss].**

Explanation: The specified date and time format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-467   **Syntax error: For the** *keyword* **keyword,** *month_value* **is not a valid month.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-468   **Syntax error: For the** *keyword* **keyword,** *day_value* **is not a valid day.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-469   **Syntax error: For the** *keyword* **keyword,** *hour_value* **is not a valid hour.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-470   **Syntax error: For the** *keyword* **keyword,** *minute_value* **is not a valid minute.**

Explanation: The specified time format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-471   **Syntax error: For the** *keyword* **keyword,** *second_value* **is not a valid second.**

Explanation: The specified time format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-472   **Syntax error: For** *keyword* **=** *keyword_value***, the MM is not valid MM/DD/YY.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-473   **Syntax error: For** *keyword* **=** *keyword_value***, the DD is not valid MM/DD/YY.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-474   **Syntax error: For** *keyword* **=** *keyword_value***, the YY is not valid MM/DD/YY.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-475   **Syntax error: For** *keyword* **=** *keyword_value***, the date format is not valid MM/DD/YY.**

Explanation: The specified date format is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-476   **Unable to switch locale to** *locale***, possibly because that locale is not installed on this system. Using locale={***locale***} instead.**

Explanation: The specified command could not switch to the locale specified in the user's environment variables. LoadLeveler is using the default locale specified in the error message.

User Response: Verify that the locale specified by the LC_ALL environment variable is installed on the machine where the command is being run. The command will execute, but any locale information–including the message catalog–will come from the default locale.

2512-477   **Unable to restore LC_COLLATE locale to** *original value*. **It will be left as:** *value used*.

Explanation: The specified command could not restore **LC_COLLATE** to its original value, prior to running the command. The value from the user's environment will be used.

User Response: Verify that the original locale is installed on the machine on which the command is being run.

2512-478   *job name* **could not open** *executable name* **to check for magic number.**

Explanation: The **llsubmit** command could not open the specified executable to verify that it is in the correct extended object file format (XCOFF).

User Response: Verify that the executable file exists, and that it has appropriate access permissions.

2512-479   *job name* **read (***file descriptor***,** *file header address***,** *file header size***) for magic number failed.**

Explanation: The **llsubmit** command could not read the specified executable's extended object file format header (XCOFF).

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-480   **Bad magic number in xcoff header.**

Explanation: The specified executable's extended object file format (XCOFF) is not recognized as one that will run on the specified machine.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-481   **Bad a.out header size in xcoff header.**

Explanation: The **a.out** header in the job's executable could not be read.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-482   **Read: read (***executable file descriptor***,** *a.out header address***,** *header size***) failed for** *job name* **executable.**

Explanation: The read action failed for the specified executable.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-483   **Bad magic number in a.out header.**

Explanation: The job's executable has an inappropriate extended object file format (XCOFF).

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-484   *job name* **nlist (***executable name***, nl structure array address) call fails. Return code =** *return code***, errno =** *error num***.**

Explanation: The **nlist** system call failed for the specified executable.

User Response: Verify that the executable is binary, that it has been compiled on the correct operating system platform, and that it is not stripped. Consult the specified error message for more information.

2512-485   *job name* **No symbol .MAIN found in executable (***executable name***).**

Explanation: The specified executable is not linked to run with a pre-LoadLeveler 2.1 checkpoint library.

User Response: Link the specified executable to the correct version of LoadLeveler's checkpoint library; use the script provided in **/usr/lpp/LoadL/full/bin** to compile and link the executable.

2512-486   *job name* **could not open** *executable name* **to check for magic number.**

Explanation: The calling program could not open the specified executable.

User Response: Verify that the executable file exists, and that it has the correct access permissions.

2512-487   *job name* **could not read** *executable name* **to check for magic number, errno =** *error num*.

Explanation: The calling program cannot read the specified executable to check its extended object file format (XCOFF) header.

User Response: Verify that the executable file has the correct access permissions.

2512-488   *job name* **could not read file header of** *executable name* **to check for magic number.**

Explanation: The calling program cannot read the specified executable's extended object file format (XCOFF) header.

User Response: Verify that the executable has the correct file access permissions, that it is binary, and that it has been compiled on the correct operating system platform.

2512-489   *job name* **Magic number of executable** *executable name* **is not SHARE_MAGIC.**

Explanation: The specified executable is not in **SHARE_MAGIC** format.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-490   *job name* **Executable** *executable name* **is not compiled for this architecture.**

Explanation: The specified executable is not compiled to run on this operating system platform.

User Response: Verify that the executable is binary, and that it has been compiled on the correct operating system platform.

2512-491   **mbstowcs() error converting string (***multibyte character input string***).**

Explanation: The command, which uses the **mbstowcs** system call, encountered an error while attempting to convert the command line input from a multibyte character string to a wide character string.

User Response: Verify that the multibyte character input string is valid, then retry the command. If the problem persists, contact IBM service.

2512-492   **Syntax error:** *error description*. **Discovered at line** *line num* **in file** *filename*.

Explanation: The command encountered an error while parsing the command input at the specified line.

User Response: Examine the expression on the specified line for incorrect syntax. Correct the problem, then retry the command.

2512-493   **Unable to evaluate expression in** *function* **at line** *line num*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2512-494   **Expression** *expression name* **expected type string, but was** *expression type*

Explanation: While processing a set expression, the specified command expected to find a character string, but found the specified type instead.

User Response: If this message has not provided sufficient information, then contact the LoadLeveler administrator.

2512-495   **Input file contains string,** *command file line***, with non-ASCII characters.**

Explanation: The command detected non-ASCII characters in the specified line. LoadLeveler expects all input to be in ASCII characters.

User Response: Correct the job command file, then resubmit the job.

2512-496   **Syntax error: For** *keyword = keyword value***, the MM is not valid [MM/DD/YY or MM/DD/YYYY].**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-497   **Syntax error: For** *keyword = keyword value***, the DD is not valid [MM/DD/YY or MM/DD/YYYY].**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-498   **Syntax error: For** *keyword = keyword value***, the year is not valid [MM/DD/YY or MM/DD/YYYY].**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the command file, then resubmit the job.

2512-499   **Syntax error: For** *keyword = keyword value***, the date format is not valid [MM/DD/YY or MM/DD/YYYY].**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-500   **Syntax error: For** *keyword = keyword value***, the value of YY in [MM/DD/YY or MM/DD/YYYY] can not be in the range 39–68.**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-501   **Syntax error: For** *keyword = keyword value***, the value of YYYY in [MM/DD/YY or MM/DD/YYYY] must be in the range 1969–2038.**

Explanation: The date format for the specified keyword is not valid.

User Response: Correct the job command file, then resubmit the job.

2512-502   **Syntax error: The date specified (year =** *year***, month =** *month***, day =** *day***) is not a valid date.**

Explanation: The specified date is not valid.

User Response: Correct the command file, then resubmit the job.

2512-504   **Version** *version_number* **of LoadLeveler for Linux does not support the** *function* **function.**

Explanation: This version of LoadLeveler for Linux does not support the specified function name.

User Response: Do not specify an API or a function name that is not supported by this version of LoadLeveler for Linux.

2512-601   **Network Table could not be loaded on node** *node_name* **due to an internal error, ntbl_load_table returned error** *error_msg***.**

Explanation: The Network Table for a job could not be loaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2512-602   **The specific window** *window_name* **could not be unloaded on node** *node_name* **due to a system error, ntbl_clean_window returned error** *error_msg***.**

Explanation: The Network Table for a job could not be unloaded on the specified machine because of a system error.

User Response: Examine the network table log in **/var/adm/sni/ntbl_log** for the cause of the failure.

2512-603   **The specific window** *window_name* **could not be unloaded on node** *node_name* **due to an internal error, ntbl_clean_window returned error** *error_msg***.**

Explanation: The Network Table for a job could not be unloaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2512-604   **The Network Table library dynamic load failed on node** *node_name* **for the following reason:** *reason*

Explanation: The Network Table library dynamic load failed on the specified machine.

User Response: Correct the problem indicated by the error message.

2512-605   **Could not determine status for adapter** *adapter_name***. Resource Monitoring and Control API failed with rc** *code*

Explanation: The switch table service (st_query_adapter) failed to obtain and return the status of the switch. The switch will be treated as NOT_READY.

User Response: Correct the problem indicated by the return code.

2512-606   **Network Table window** *window_name* **could not be unloaded on node** *node_name* **due to a system error, ntbl_unload_table returned error** *error_msg***.**

Explanation: The Network Table for a job could not be unloaded on the specified machine because of a system error.

User Response: Examine the switch table log in **/var/adm/sni/ntbl_log** for the cause of the failure.

2512-607   **Previous Network Table could not be removed on node** *node_name* **for the following reason:** *reason***.**

Explanation: The previous network table for a job could not be removed on the specified machine.

User Response: Correct the problem indicated by the error message.

2512-608   **Network table could not be loaded on node** *node_name***.**

Explanation: The network table for a job cannot be loaded on the specified machine because of a system error.

User Response: Examine the switch table log in **/var/adm/sni/ntbl_log** for the cause of the failure.

2512-609   **Network Table could not be loaded on node** *node_name* **due to a system error, ntbl_load_table returned error** *error_msg***.**

Explanation: The Network Table for a job could not be loaded on the specified machine because of a system error.

User Response: Examine the network table log in **/var/adm/sni/ntbl_log** for the cause of the failure.

2512-610   **Attention: A css_type of** *value* **was specified in the adapter stanza name of** *stanza name***, adapter** *adapter* **will be created.**

Explanation: An adapter stanza referenced a nonexistent css_type.

User Response: Adapter stanzas should refer only to existing css_type.

2512-611   **Attention: An adapter_type of** *type* **was specified in the adapter stanza name of** *name***, adapter** *adapter_name* **will be created.**

Explanation: An adapter stanza referenced a nonexistent adapter_type.

User Response: Adapter stanzas should refer only to an existing adapter_type.

2512-612   **Attention: A** ″**sn**″ **adapter specified for adapter:** *adapter_name* **but no** ″**logical_id**″ **was found.**

Explanation: No logical_id was associated with the specified adapter stanza.

User Response: Specify a logical_id for the specified adapter stanza.

2512-613   **Attention: The adapter_type value specified for the switch adapter,** *adapter_name***, is not valid.**

Explanation: The specified adapter's **adapter_type** value was not valid.

User Response: Specify a valid **adapter_type** value, then reconfigure LoadLeveler. Refer to *LoadLeveler: Using and Administering* for the appropriate values.

2512-614   **The** *adapter_type* **is ignored.**

Explanation: The *adapter_type* is ignored.

User Response: Consult the previous error message for more information.

2512-615   **Attention: An adapter_type value was not specified for the switch adapter:** *adapter***.**

Explanation: All switch adapters must have the **adapter_type** keyword specified with an appropriate value.

User Response: Specify a valid **adapter_type** value, then reconfigure LoadLeveler. Refer to *LoadLeveler: Using and Administering* for the appropriate values.

2512-616   **Defaulting adapter_type to** *value***.**

Explanation: An **adapter_type** value was not specified for a switch adapter. LoadLeveler will use the specified default value.

User Response: Enter an **adapter_type** value for the switch adapter in the LoadLeveler administration file.

2512-617   **Attention: A** ″**sn**″ **adapter specified for adapter:** *adapter_name* **but no** ″**network_id**″ **was found.**

Explanation: No **network_id** was associated with the specified adapter stanza.

User Response: Specify a **network_id** for the specified adapter stanza.

| **2512-618**   Version *version* **of LoadLeveler does not support** *feature***.**

| **Explanation:** This version of LoadLeveler does not support the specified feature.

| **User Response:** Do not specify the parameters associated with this feature in your configuration file or job
| command file.

| **2512-619**   **The** *keyword* **keyword can not be used in the** *version* **version of LoadLeveler.**

| **Explanation:** The specified keyword cannot be used by this version of LoadLeveler.

| **User Response:** Do not specify the parameters associated with this feature in your configuration file or job
| command file.

| **2512-620**   **Too many macro expansions while processing** *string_being_expanded***. Stopped at**
| *expanded_string_when_expansion_quit***. Possible recursion. Macro will not be expanded.**

| **Explanation:** During expansion of LoadLeveler macros, a single string was expanded too many times. Typically this
| is due to a recursive macro definition, but can also occur with complicated macros.

| **User Response:** If the macro is defined recursively, remove the recursion. If the macro is complicated with many
| substitutions, it must be simplified.

2512-689   **The DeviceName is missing from the returned RMC data from the IBM.NetworkInterface for
                adapter** *adapter_name* **with address** *ip_address* **for the OSI (machine)** *OSI_machine_name***. This may
                cause errors when attempting to use the adapter or load the switch table.**

Explanation: The adapter in question requires a DeviceName for loading the switch table. The DeviceName was
missing from the data retrieved from the RMC.

User Response: Check the data in the IBM.NetworkInterface for the OSI to determine why the DeviceName is
missing.

2512-690   **Unable to open the file** *file name* **for processing:** *error information***. Verify that RSCT is installed.**

Explanation: The command cannot open the specified RSCT library file for processing.

User Response: Check that the RSCT package is installed on this system.

2512-691   **Unable to obtain address of** *symbol name* **symbol in RSCT library** *RSCT library name***:** *error information***.**

Explanation: The command cannot obtain the address of the symbol from the specified RSCT library.

User Response: Check that the RSCT package installed is compatible with this version of LoadLeveler.

2512-751   *checkpoint or restart* **failed with errno** *error number [error message]***, checkpoint file =** *filename***, checkpoint
                error file =** *filename***.**

Explanation: A checkpoint or restart operation failed. The reason for failure was not written to the checkpoint error
file. The most likely cause of this failure is that the checkpoint file or the error file is not accessible or there is not
enough space in the file system to create the necessary files.

User Response: Consult the specified error message for more information.

2512-777   **DR_Write failed, returned** *return_code***, fd =** *file_descriptor***, errno =** *error_num***.**

Explanation: XDR encountered an error; XDR is used to transmit data among LoadLeveler commands and daemons.

User Response: Have the system administrator verify that the LoadLeveler daemon is still running. If the problem
persists, contact IBM service.

2512-835 **User** *username* **is not authorized to checkpoint the job.**

Explanation: Only the owner of a job or an administrator can request a checkpoint for a job.

User Response: Verify that the user has permission to checkpoint the job.

2512-836 **Request to checkpoint job step** *job id* **is ignored, job step not found.**

Explanation: The job step for the specified ID was not found. The checkpoint request is ignored.

User Response: Verify that a valid job step ID was specified and that the job step is still running.

2512-837 **Request to checkpoint job step** *job id* **is ignored, a checkpoint is pending or already is in progress.**

Explanation: A previous request to checkpoint the specified job step is in progress. The checkpoint request is ignored.

User Response: Verify that a job step is not already checkpointing before requesting a checkpoint.

2512-838 **Request to checkpoint job step** *job id* **is ignored because the job step is not running, current state =** *job state***.**

Explanation: The specified job step could not be checkpointing because it was not in a running state.

User Response: Before requesting a checkpoint verify that a job step is running is in a running state and that job processes are actually running.

2512-839 **Request to checkpoint job step** *job id* **failed because the checkpoint order cannot be sent to the** *daemon_name* **on node** *node_name***.**

Explanation: Either the connection to the specified daemon on the specified node failed or the transmission of the checkpoint order failed.

User Response: Verify that the LoadLeveler daemon is running on the specified host, and that the host can be accessed on the network.

2512-840 **Request to checkpoint job step** *job id* **is ignored because checkpointing is not enabled for the job step.**

Explanation: The **CHECKPOINT** option in the job command file was not set to enable checkpointing.

User Response: Enable checkpointing for the job step by set the **CHECKPOINT** option in the job command file to an appropriate value.

2512-841 **Checkpoint operation failed because the process initiating the checkpoint terminated abnormally (exit code =** *value* **signal =** *value***).**

Explanation: Under certain circumstances LoadLeveler starts a new process to initiate a checkpoint of a job step. That process terminated with a signal or with a nonzero exit code indicating that the checkpoint operation was not started.

User Response: Verify that the binary, **llckptstarter**, is installed in the same directory as the **LoadL_starter** binary and verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes.

2512-842 **Step** *job step* **terminated before checkpoint status could be determined.**

Explanation: The status of a checkpoint request could not be determined because either the checkpoint status information could not be sent from the machines initiating the checkpoint, or the status information was not received before the job step terminated.

User Response: Examine the files in the checkpoint directory to determine if a successful checkpoint was taken. If the problem persists, contact IBM service.

2512-843   **Checkpoint FAILED for job step** *job_step_ID***, with the following error: primary error code =** *primary_error***, secondary error code =** *secondary_error/extended_error***, error msg len =** *length***, error msg =** *message*

Explanation: The checkpoint could not be taken.

User Response: Correct any errors identified by the error codes or error message file. If the problem persists, then contact IBM service.

2512-844   **Initialization of checkpoint for job step** *job_step* **has been unsuccessful.** *error_message*

Explanation: The checkpoint could not start. This message is issued when a job step being checkpointed with the no wait option cannot start. There may be additional message information.

User Response: Ensure LoadLeveler and the job step selected for checkpoint are running. Correct other error conditions indicated by the error codes and error message (if provided).

2512-845   **Restart from checkpoint file,** *filename***, failed with the following error: primary error code =** *error_code***, secondary error code =** *error_code2***, error msg len =** *message_length***, error msg =** *error_msg***.**

Explanation: The restart operation for the job step failed. The job was canceled.

User Response: Correct the error condition indicated by the error codes and error message (if provided).

2512-846   **Time is not specified or the time format is not valid. The time should be specified using the format: [mm/dd[/[cc]yy]]HH:MM.**

Explanation: The start time of the reservation must be specified using the **-t** flag.

User Response: Specify a valid start time in the form: [*mm*/*dd*[/[*cc*]*yy*]]*HH:MM*.

2512-847   **Duration of at least** *minimum_number_of_minutes* **minutes must be specified.**

Explanation: The duration of the reservation is either missing or not valid.

User Response: Specify the duration of the reservation as an integer greater than the minimum number of minutes.

2512-848   **No** *keyword* **was specified.** *keyword* **is required with the** *option* **option.**

Explanation: The specified *option* was provided without a value.

User Response: When using the specified *option*, reissue the command with the required value.

2512-849   **Encountered one or more errors while processing the list of group names.**

Explanation: The command encountered errors while processing the arguments of the **-g** option.

User Response: Verify that the group names associated with the **-g** option are valid.

2512-850   **The maximum number of reservations allowed for the LoadLeveler cluster cannot be exceeded.**

Explanation: The number of reservations allowed to be waiting or active in the LoadLeveler cluster has been reached. Creating the requested reservation will exceed the limit. This limit is controlled by the keyword **MAX_RESERVATIONS** in the LoadLeveler configuration file.

User Response: Wait for a reservation to complete or be canceled and retry the request.

2512-851   **The request violates time restrictions for creating and modifying reservations.**

Explanation: When creating a new reservation, the following rules apply:
- The requested setup begin time (requested start time - **RESERVATION_SETUP_TIME**) cannot be earlier than the current time.
- The requested start time must be at least **RESERVATION_MIN_ADVANCE_TIME** minutes from the current time.

When modifying an existing reservation, the following rules apply:
- Users who are not LoadLeveler administrators are not permitted to change the start time, duration, or the nodes selected for the reservation within **RESERVATION_MIN_ADVANCE_TIME** minutes of the current setup begin time (current start time - **RESERVATION_SETUP_TIME**).
- When changing the start time, the new start time cannot be earlier than the current time.
- When changing the duration, the new end time (start time + duration) cannot be earlier than the current time.

User Response: Modify the value violating the time rules and reissue the request.

2512-852   **The minimum number of nodes that can be reserved is** *minimum_number_of_nodes***.**

Explanation: You must specify at least the minimum number of nodes.

User Response: Resubmit the reservation request specifying at least the minimum number of nodes.

2512-853   **The maximum number of reservations for user** *user_name* **has been exceeded.**

Explanation: The maximum number of reservations allowed for the specified user has been reached. The user cannot own additional reservations at this time.

User Response: Resubmit the reservation request once a reservation owned by the user completes.

2512-854   **The maximum number of reservations for group** *group_name* **has been exceeded.**

Explanation: The maximum number of reservations allowed for the specified group has been reached. Members of that LoadLeveler group cannot make additional reservations at this time.

User Response: Resubmit the reservation request once a reservation owned by the group completes.

2512-855   **Permission denied. Either you do not have the correct authority to perform the reservation request or the request cannot be completed at this time.**

Explanation: Permission to perform the request was denied for one of the following reasons:
- You do not have the required authority
- You do not have a reservation quota
- If attempting to remove a machine from a reservation, a bound job is currently running on that machine

User Response: Determine whether the request has any obvious permission problems and correct as appropriate. If necessary, examine the NegotiatorLog and the SchedLog for messages indicating the reason that the request cannot complete.

2512-856   **The specified job step** *job_step* **for node selection does not exist.**

Explanation: The specified job step to select nodes for the reservation does not exist.

User Response: Resubmit the reservation request using a different job step.

2512-857   **The specified job step** *job_step* **for node selection is not in the correct state.**

Explanation: The specified job step to select nodes for the reservation must be in an idle-like state.

User Response: Resubmit the reservation request using a job step that is in the correct state.

2512-858   **One or more machines in the hostlist are not in the LoadLeveler cluster.**

Explanation: At least one of the machines specified in the host list is not in the LoadLeveler cluster.

User Response: Verify the machine names in the LoadLeveler cluster and resubmit the reservation request using only those machines.

2512-859　　　　**Reservations are not permitted on one or more machines in the hostlist.**

Explanation:　At least one of the machines specified in the host list does not allow you to make reservations.

User Response:　Use the **llstatus** command to determine what machines in the LoadLeveler cluster allow you to make reservations and resubmit the reservation request using only those machines.

2512-860　　　　**The scheduler in use does not support reservations.**

Explanation:　The LoadLeveler scheduler in use does not support reservations.

User Response:　Use the backfill scheduler that supports reservations. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file and scheduler types that support reservations.

2512-861　　　　**The Schedd machine** *schedd_host_name* **cannot connect to the Central Manager.**

Explanation:　The schedd machine cannot connect to the central manager to satisfy the request.

User Response:　Verify that the **LoadL_negotiator** daemon is running and that the host can be accessed on the network.

2512-862　　　　**One or more input parameters are incorrect.**

Explanation:　One or more parameters contain a value that is not valid.

User Response:　Correct the input and resubmit the request.

2512-863　　　　**A transmission error or timeout occurred; no specific data is available.**

Explanation:　An error occurred sending data either between the LoadLeveler daemons or between the daemon and the API.

User Response:　Reissue the request if necessary.

2512-864　　　　**The requested reservation duration,** *minutes* **minutes, exceeds the maximum allowed.**

Explanation:　The administrator has defined the maximum number of minutes that a reservation can take. Your request exceeds that maximum.

User Response:　Reissue the request with a duration less than the maximum number of minutes.

2512-865　　　　**Cannot connect to the central manager machine.**

Explanation:　The API cannot connect to the central manager machine to satisfy the request.

User Response:　Verify that the **LoadL_negotiator** daemon is running and that the host can be accessed on the network.

2512-866　　　　**The requested reservation** *reservation_name* **does not exist.**

Explanation:　The specified reservation ID does not exist.

User Response:　Resubmit the request using an existing reservation ID.

2512-867　　　　**Unable to complete the request.** *API_name* **returns** *return_code***.**

Explanation:　The request was not successful.

User Response:　Check the error returned to determine the reason for failure and to see if any corrective action needs to be performed. Refer to *LoadLeveler: Using and Administering* for error code information.

2512-868   Incompatible options specified.

Explanation: One or more of the options provided, either from the command line or as input to the API, is incompatible with another option.

User Response: Resubmit your request with valid input. Refer to *LoadLeveler: Using and Administering* for additional information.

2512-869   Reservation ID is required.

Explanation: You did not specify a reservation ID.

User Response: Resubmit your request specifying a valid reservation ID.

2512-870   Encountered one or more errors while processing the list of reservation IDs.

Explanation: The command encountered errors while processing the arguments of the **-R** option.

User Response: Verify that the reservation names associated with the **-R** option are valid.

2512-871   The reservation state does not allow the requested operation.

Explanation: The reservation is in a state that does not allow you to perform the requested operation.

User Response: Verify the state of the reservation. Refer to *LoadLeveler: Using and Administering* for restrictions when performing the requested operation.

2512-872   The argument for the *option* **option is missing or missing a blank.**

Explanation: The argument for the indicated flag is either missing or a blank is missing between the flag and argument.

User Response: Reissue the command using the proper syntax. You can either use the **-?** flag to obtain syntax information for the command, or the **-H** flag to get extended usage information.

2512-873   The requested reservation duration, *minutes* **minutes, exceeds the maximum allowed (***maximum_minutes* **minutes for user** *user***,** *maximum_group_minutes* **minutes for group** *group***).**

Explanation: The administrator has defined the maximum number of minutes that a reservation can take. Your request exceeds that maximum.

User Response: Reissue the request with a duration less than the maximum number of minutes.

2512-874   *function_name* returns *return_code***. Please use** *command* **to check whether the request has been granted.**

Explanation: An error code was returned. One possible reason for the error is that a transaction timed out. The request may have been granted already or is to be granted soon. Issue *command* to determine whether the request has been granted.

User Response: Determine whether the request has been granted. If necessary, reissue the request.

2512-875   The method for reserving nodes and the associated data must be specified using one of the following options: *available_methods***.**

Explanation: When creating a reservation, you must provide the method for selecting nodes for the reservation and associated data.

User Response: Resubmit the reservation request using one of the available methods:
- **RESERVATION_BY_JOBSTEP (-j** flag)
- **RESERVATION_BY_NODE (-n** flag)
- **RESERVATION_BY_HOSTLIST (-h** flag)
- **RESERVATION_BY_JCF (-f** flag)

2512-876   **The reservation has not been created. ll_make_reservation() returns** *return_code*.

Explanation: An error occurred creating the reservation. The reservation was not made.

User Response: The error code returned will identify the reason for failure. Refer to *LoadLeveler: Using and Administering* for error code information and take the appropriate corrective action.

2512-880   **A list of job steps must be specified when binding to or unbinding from a reservation.**

Explanation: For a bind or unbind request, a list of job steps must be provided. A job on the list represents all steps in the job.

User Response: Resubmit the bind request specifying the list of job steps that are to be bound or unbound.

2512-881   **The ID of an existing reservation must be provided when binding job steps to a reservation.**

Explanation: You must specify a reservation ID when requesting that job steps be bound to a reservation.

User Response: Resubmit the bind request specifying the reservation ID that the job steps are to be bound to.

2512-882   **Bind request failed. The job steps are not bound to reservation** *reservation_ID*.

Explanation: An error occurred processing the bind request.

User Response: Resubmit the bind request specifying a valid reservation ID and a list of job steps that are in an idle-like state. A job on the list represents all steps in the job.

2512-883   **Unbind request failed. The job steps have not been unbound from their respective reservations.**

Explanation: An error occurred processing the unbind request.

User Response: Resubmit the request to unbind job steps from the reservations that they are bound to by specifying valid job steps that are bound to or have requested to be bound to a reservation. A job on the list represents all steps in the job.

2512-884   **Do not specify reservation ID when unbinding job steps from reservations.**

Explanation: A reservation ID must not be specified when requesting that a job step (or job steps) be unbound from the reservations that they are bound to.

User Response: Resubmit the unbind request without specifying a reservation ID.

2512-888   **A list of reservation IDs cannot be specified when userlist, hostlist, or grouplist is specified.**

Explanation: When a reservation is canceled, either a list of reservation IDs can be specified for removal, or a combination of users, hosts, and groups can be specified.

User Response: Resubmit the request to remove the reservation specifying either reservation IDs only, or any combination of users, hosts, and groups.

2512-892   **User** *user_ID* **is not authorized to change the owner of reservation** *reservation_ID*. **Only the LoadLeveler administrator can modify the owner of a reservation.**

Explanation: Only the LoadLeveler administrator can change the owner of a reservation.

User Response: Contact the LoadLeveler administrator to process the requested change.

2512-893   **Modifying the duration of reservation** *reservation_ID* **by** *minutes* **minutes causes it to exceed the maximum duration allowed.**

Explanation: Changing the duration of the reservation by the number of minutes specified creates a duration greater than that allowed by the LoadLeveler configuration for either the user or the LoadLeveler group.

User Response: Resubmit the request using a duration that does not exceed the maximum duration.

| **2512-897**   **Request to modify job step** *job_step* **is ignored. The job step is in a terminating state.**

| **Explanation:**   The job step is terminating. The modify request is ignored.

| **User Response:**   Specify a step that is not being removed from the system.

| **2512-898**   **Step** *job_step_ID* **can not be made non preemptable because it overlaps with a reservation.**

| **Explanation:**   The end time of the specified job step extends beyond the start time of an existing reservation. The job
| step must be preemptable. The modify request is ignored.

| **User Response:**   Specify a step that does not overlap a reservation.

2512-901   **Unable to set gid for user.**

Explanation: LoadLeveler could not set the user's gid before starting the user's job step. This message will be
followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-902   **Unable to set process limits for user.**

Explanation: LoadLeveler could not set Resource process limits before starting the user's job step. This message will
be followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-903   **Unable to set** *resource limit* **limit for user.**

Explanation: The specified process resource limit could not be set before starting the user's job step. This message
will be followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-904   **Cannot run a job for root, uid=**ize*uid*, **gid=**gid*.*

Explanation: LoadLeveler will not run any job with root privileges.

User Response: Resubmit the job as a non-root user.

2512-905   **Cannot fork process for** *task_name*. **errno=**error_num error_msg*.*

Explanation: The **fork** system call failed for the specified process.

User Response: Consult the specified error message for more information.

2512-906   **Cannot set user credentials.**

Explanation: Credentials for the user cannot be set for the job step. This message is usually followed by a detailed
message about the exact cause of the failure.

User Response: Consult the specified error message for more information.

2512-907   **Uid cannot be verified on** *hostname*.

Explanation: The starter cannot verify that the **uid** of the user submitting the job is valid on the machine trying to
run the job step. This message will be followed by a detailed message about the exact cause of the failure.

User Response: The user must have the same **uid** on the submitting machine as on the running machine.

2512-908   **Gid cannot be verified on** *hostname***.**

Explanation: The starter cannot verify that the **gid** of the user submitting the job is valid on the machine trying to run the job step. This message will be followed by a detailed message about the exact cause of the failure.

User Response: The user must have the same **gid** on the submitting machine as on the running machine.

2512-909   **Cannot get user credentials.**

Explanation: Credentials for the user cannot be obtained. This message will be followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-910   **User credentials are not authorized.**

Explanation: Credentials for the user cannot be set for the job step. This message is usually followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-911   **Cannot receive executable from Schedd.**

Explanation: A transaction from the **starter** on a run machine to the **schedd** on a submit machine has failed to retrieve the executable file.

User Response: Examine **SchedLog** and **StarterLog** to determine the cause of the failure.

2512-912   **Cannot open** *stdin, stdout, or stderr* **file.** *error_msg***.**

Explanation: The **open** system call failed for one of the **stdio** files for the job step.

User Response: Verify that the directory and file exist, and that the user has permission to access the directory.

2512-913   **Unable to validate privileges for stdio.**

Explanation: The **llcheckpriv** program cannot access a **stdio** file for the job step and will not return an error message.

User Response: Examine the **StarterLog** for messages indicating the reason for the failure.

2512-914   **Checkpointing was requested but program is not an executable.**

Explanation: Only a binary program can be checkpointed. Checkpointing is not valid with a shell script.

User Response: Either specify a binary program for the executable, or turn off checkpointing, then resubmit the job.

2512-915   **Checkpointing was requested but program is not linked with LoadLeveler libs.**

Explanation: Only a binary program can be checkpointed. Checkpointing is not valid with a shell script. A program that is to be checkpointed must be linked with the LoadLeveler libraries.

User Response: Link the program with the LoadLeveler libraries, then resubmit the job.

2512-916   **Program linked with LoadLeveler libs but checkpointing is not requested.**

Explanation: The program specified as the executable is linked with the LoadLeveler executables, which are used for checkpointing, but the program will not be checkpointed because checkpointing has not been specifically requested.

User Response: Either link the program without the LoadLeveler libraries, or turn on checkpointing, then resubmit the job.

2512-917   **Cannot exec process for** *task_name*. **errno=***error_num error_msg*.

Explanation: The **execute** system call failed for the specified process.

User Response: Consult the specified error message for more information.

2512-918   **Unable to set uid for user.**

Explanation: The **uid** for the user could not be set before starting the user's job step. This message will be followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-919   **Cannot receive job data from schedd on** *hostname*.

Explanation: An error occurred as the **starter** was requesting the job information from the **schedd** on the specified host.

User Response: Examine the **SchedLog** and the **StarterLog** on the appropriate machines for the exact cause of the failure.

2512-920   **Cannot send READY status to the startd, the job step will be rejected.**

Explanation: An error occurred as the starter was attempting to send the **READY** status to the **startd**. Because a parallel job step will not continue until all nodes are **READY**, the job step will be rejected.

User Response: Examine the **SchedLog** and the **StarterLog** for the exact cause of the failure.

2512-921   **Job was not accepted by NQS.**

Explanation: An error occurred when a job was submitted to **NQS**.

User Response: Examine the output from the **qsub** command for the exact cause of the failure.

2512-922   **The LoadL_starter process terminated before the job step completed. The job step is vacated.**

Explanation: The **LoadL_starter** process which started a job step has terminated abnormally while waiting for the job step to complete. Because the true status of the job step cannot be determined, the job step is vacated. The vacated job step will be rescheduled to run if it is marked restartable.

User Response: Examine the appropriate machine's LoadLeveler logs to determine the cause of the **LoadL_starter** failure.

2512-934   **Unable to set uid for user on** *hostname*.

Explanation: The **uid** for the user could not be set before starting the user's job step. This message will be followed by a detailed message about the exact cause of the failure.

User Response: Consult the subsequent detailed error message for more information.

2512-935   **The switch table cannot be loaded on** *host name* **because the** *adapter name* **switch adapter is not configured on the node.**

Explanation: The job step requires that a switch table be loaded for the specified switch adapter, but the switch adapter has not been specified in the LoadLeveler configuration file. This error occurs if the entire LoadLeveler cluster is not reconfigured after adding or deleting switch adapters from the LoadLeveler administration file.

User Response: Add the switch adapter to the LoadLeveler administration file, then use the **llctl -g reconfig** command to reconfigure the entire LoadLeveler cluster.

2512-936 No switch tables were loaded on *machine_name* for any adapters on this machine. There is a possible configuration problem.

Explanation: The job step requires a switch table to be loaded for at least one switch adapter, but none of the switch tables are for an adapter on this machine. This error will occur if switch adapters have been added or deleted from the LoadLeveler administration file and only a subset of the LoadLeveler cluster was reconfigured.

User Response: Add all of the appropriate switch adapters to the LoadLeveler administration file and reconfigure the entire LoadLeveler cluster using the **llctl -g reconfig** command.

2512-937 *job step*: **Restricted Login Check - loginrestrictions returned rc=***loginrestrictions return code* **and errno=***loginrestrictions errno* **(***AIX explanation for the errno***) for users** *user name* **in registry** *registry name* **indicating login is not permitted. AIX supplemental information:** *returned AIX error message (if any)*

Explanation: The **loginrestrictions** service returned a status for the user indicating the user may not log into this machine where the job was to be run. The user's job is rejected. The configuration parameter REJECT_ON_RESTRICTED_LOGIN controls the checking of the **loginrestrictions**.

User Response: Check the underlying system security method and the nodes where the job was to run to determine why the user is locked out from login.

2512-938 The LoadL_starter process terminated before the job step completed. The job step is rejected.

Explanation: The **LoadL_starter** process that started a job step terminated abnormally while waiting for the job step to complete. Because the true status of the job step cannot be determined, the job step is rejected. The rejected job step will be rescheduled to run if it is marked restartable.

User Response: Examine the appropriate machine's LoadLeveler logs to determine the cause of the **LoadL_starter** failure.

2512-976 The name for the DCE *group* group could not be found. Provide this name with the *keyword* keyword in the LoadLeveler configuration file.

Explanation: **lldcegrpmaint** could not find the specified DCE group name for the current cluster.

User Response: Use the specified keyword to set this group name in the global LoadLeveler configuration file.

2512-977 No DCE host names could be found for the machines in this LoadLeveler cluster. Run the llextSDR command and update the LoadL_admin file with the resulting output to obtain this information.

Explanation: **lldcegrpmaint** could not find any DCE host names in the LoadLeveler administration file's machine stanzas.

User Response: Run the **llextSDR** command, then update the machine stanzas with the command's output.

2512-978 The DCE service names of the LoadLeveler daemons could not be determined. Make sure that the file /usr/lpp/ssp/config/spsec exists on the current machine, and that you have access to it.

Explanation: The specified file provides Security Services with service names that define LoadLeveler daemons to DCE.

User Response: Verify that **lldcegrpmaint** can access the **/usr/lpp/ssp/config/spsec_defaults** file. If the file is not present, then verify that PSSP has been installed, and that DCE has been configured on this machine.

2512-979 Unable to create DCE group *DCE group name*. DCE returned the following message: *DCE error message*.

Explanation: DCE failed to create the specified group.

User Response: Verify that your DCE credentials have not expired, and that the specified group does not already exist in the DCE registry.

2512-980   **Improper format for LoadLeveler SERVICE: record in** *error message text* **file.**

Explanation: The LoadLeveler data in the **spsec_defaults** file is in an improper format.

User Response: Verify that the specified file exists, and the LoadLeveler data it contains uses the correct syntax for the **spsec_defaults** file.

2512-981   **Unable to** *command* **DCE principal name** *daemon's DCE principal name "to" or "from"* **DCE group** *DCE group name.* **DCE returned the following message:** *DCE message.*

Explanation: **lldcegrpmaint** issued a DCE command to add or remove a principal name from the specified DCE group. DCE issued a failing return code.

User Response: Verify that the principal name is defined in the DCE registry.

2512-982   **Unable to determine the name of the current DCE cell.**

Explanation: The **lldcegrpmaint** command could not determine the name of the current host's DCE cell.

User Response: Verify that DCE is installed and configured on the current host; if the problem persists, then contact your DCE administrator.

2512-991   **Central Manger reported errors but specific data did not get transmitted.**

Explanation: The API was expecting a list of error codes and step IDs, but the data members were empty.

User Response: Reissue the modify request.

2512-992   **The job step** *job_step* **was not in** *job_state* **state. The** *modify_enum* **was not modified.**

Explanation: The step was not in the correct state for the requested modification.

User Response: Change the modify request.

2512-993   **Request to modify job step** *job_step_id* **is ignored, job step not found.**

Explanation: The job step for the specified ID was not found. The modify request is ignored.

User Response: Verify that a valid job step ID was specified and that the job step is in the system.

2512-994   **User** *username* **is not authorized to modify the job step** *job_step_id.*

Explanation: Only the owner of a job or an administrator can request to modify a job step.

User Response: Verify that the user has permission to modify the job.

2512-995   **This version of llmodify does not support the -x option.**

Explanation: This version of the command or the API does not support the **-x** option.

User Response: Reissue the modify request without the **-x** option.

2512-996   **Overlapping step** *step_ID* **with a reservation is not allowed. The** *step_attribute* **was not modified.**

Explanation: A step cannot be modified if it is already or would be overlapping with a reservation to which the step is not bound.

User Response: If possible, remove the overlapping reservation and try again.

| **2512-997**   **The** *option* **option is not available with the** *scheduler* **scheduler.**

| **Explanation:** The requested option is not supported with the current scheduler type.

| **User Response:** Reissue the modify request without the specified option.

| **2512-998**   **Process tracking must be enabled in order to use the suspend method for preemption.**

| **Explanation:** The suspend method for preemption requires process tracking.

| **User Response:** Use a preempt method other than suspend or enable process tracking.

2539 Error messages

2539-001   **Could not open input file (/dev/null) for pipe input.**

Explanation: The **open(″/dev/null″, O_RDONLY)** command failed.

User Response: Contact the LoadLeveler administrator.

2539-002   *command* **was not executed.**

Explanation: **xloadl** failed to execute a system command.

User Response: The reason for this error should be displayed immediately preceding this message.

2539-003   **Could not create stdout pipe from** *command*, **errno =** *error_num*.

Explanation: The specified **pipe** command failed.

User Response: Check the error number to determine why the command failed.

2539-004   **Could not create stderr pipe from** *command*, **errno =** *error_num*.

Explanation: The specified **pipe** command failed.

User Response: Check the errno to determine why the command failed.

2539-005   **Could not fork process for** *command*, **errno =** *error_num*.

Explanation: LoadLeveler failed to fork the specified command.

User Response: Check the errno to determine why the command failed.

2539-006   **Could not execute command** *command*. **errno=***error_num*.

Explanation: LoadLeveler failed to execute the specified command.

User Response: Check the errno to determine why the command failed.

2539-007   **Not a valid selection. Field is not set.**

Explanation: The field was not updated because you entered a non-valid value.

User Response: Reselect a value from the selection box. If you typed a value, then verify that the spelling matches a valid value.

2539-008   **Logging has already been started to file** *filename*.

Explanation: Logging cannot be started because commands are already being logged to the specified file.

User Response: If you want commands logged to the specified file, you do not need to do anything. If you want to begin logging to another file: select **Stop Logging**, then select **Start Logging** with your new file specified.

2539-009   **No jobs are selected.**

Explanation: The tasks that you want to perform require that you select at least one job step.

User Response: Select a job step, then invoke the command again.

2539-010   **Could not get details for selected jobs.**

Explanation: The information for the selected jobs was not returned.

User Response: Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-011　　　**Could not get Status for selected jobs.**

Explanation:　The information for the selected jobs was not returned.

User Response:　Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-012　　　**Could not get Report for selected jobs.**

Explanation:　The information for the selected jobs was not returned.

User Response:　Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-013　　　**No host specified. No selection performed.**

Explanation:　Although one of the **by_host** parameters for **job_filter** has been indicated, there is no indication of which machines have been provided.

User Response:　The previous setting for filtering jobs will be used. Respecify the new filter by using **Select** on the menu bar.

2539-014　　　**The selection parameter was not changed.**

Explanation:　No matches were found, so the jobs were not filtered. There may be a problem with the regular expression, or there may not be any machines which match the regular expression.

User Response:　If there is a problem with the regular expression, then a message explaining that will precede this one. You may need to adjust the regular expression.

2539-015　　　**No user specified. No selection performed.**

Explanation:　Although one of the **by_user** parameters for **job _filter** has been indicated, there is no indication of which users have been provided.

User Response:　The previous setting for filtering jobs will be used. Respecify the new filter by using **Select** on the menu bar.

2539-016　　　**No group specified. No selection performed.**

Explanation:　Although one of the **by_group** parameters for **job_filter** has been indicated, there is no indication of which groups have been provided.

User Response:　The previous setting for filtering jobs will be used. Respecify the new filter by using **Select** on the menu bar.

2539-017　　　**No job specified. No selection performed.**

Explanation:　Although a **job_filter** has been indicated, there is no indication of which job step ids have been provided.

User Response:　The previous setting for filtering jobs will be used. Respecify the new filter by using **Select** on the menu bar.

2539-018　　　**Internal error:** *filter_type* **is not a valid filter.**

Explanation:　A non-valid filter type has been selected.

User Response:　Exit and restart **xloadl**.

2539-019   **No user specified. Order user not performed.**

Explanation: A **Favor User** command cannot be issued with a blank user name.

User Response: Type a user name in the text field of the prompt dialog box.

2539-020   **Only the LoadLeveler administrator may order users.**

Explanation: You must be a LoadLeveler administrator to order users.

User Response: Have a LoadLeveler administrator issue this command.

2539-021   **Unknown pulldown number:** *pulldown_num***.**

Explanation: The item selected on the pulldown menu has translated into an unrecognized number.

User Response: Exit and restart **xloadl**.

2539-022   **Could not get tasks for selected jobs.**

Explanation: The information for the selected jobs was not returned.

User Response: Consult the preceding error messages for possible causes. If there are no other messages, verify that the job step has completed.

2539-025   **No machine is selected.**

Explanation: The task you want to perform requires that you select at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the command again.

2539-026   **No schedd machine specified. No purge performed.**

Explanation: The **Purge** command requires that you specify a **schedd** machine.

User Response: Enter a machine name into the **Purge Machine** dialog box.

2539-027   **No machines selected. No machines will be purged.**

Explanation: The **Purge** command requires that you specify at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the **Purge** command again.

2539-028   **No host is selected for details.**

Explanation: The **Details** command requires that you specify at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the command again.

2539-029   **Could not get details for selected machines.**

Explanation: No details were returned for the selected machines.

User Response: Consult the preceding error messages for reason details were not returned.

2539-031   **No host selected for Version.**

Explanation: The **Version** command requires that you specify at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the command again.

2539-032   **Could not get Version for selected machines.**

Explanation: No version information was returned for the selected machines.

User Response: Consult the preceding error messages for reason details were not returned.

2539-033   **No host selected for Collecting data.**

Explanation: The **Capture Data** command requires that you specify at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the command again.

2539-034   **No Operating System specified. No selection performed.**

Explanation: To change the selection filter to **by OpSys,** you must specify an operating system. The value returned was **NULL**, so the filter was not changed.

User Response: To reset the selection filter, use the **Select** pulldown menu in the **Machines** window.

2539-035   **No Architecture specified. No selection performed.**

Explanation: To change the selection filter to **by Arch**, you must specify an architecture. The value returned was **NULL**, so the filter was not changed.

User Response: To reset the selection filter, use the **Select** pulldown menu in the **Machines** window.

2539-036   **No host selected for Capture.**

Explanation: The **Capture Data** command requires that you specify at least one machine.

User Response: Select a machine from the **Machines** window, then invoke the command again.

2539-038   **Value of** *resource_name* **is not valid, resetting from** *resource_value* **to** *default_value***.**

Explanation: The value of the specified Resource is not valid, so a default value is being used.

User Response: If the default value is not acceptable to you, then exit **xloadl**, change the value of the Resource in your **Xloadl** or **.Xdefaults** file, and reinvoke **xloadl**.

2539-039   **No ADMIN_FILE specified in LoadL_config. Cannot start LoadLeveler.**

Explanation: LoadLeveler cannot start without an administration file.

User Response: Add an **ADMIN_FILE** keyword and value to your configuration file. For example, ″**ADMIN_FILE = /u/loadl/LoadL_admin**″.

2539-041   **Can not get configuration information. xloadl cannot continue.**

Explanation: **xloadl** cannot start because it could not get configuration information.

User Response: Verify that the LoadLeveler administration and configuration files are available and accessible.

2539-043   **Unable to malloc()** *num* **bytes of memory.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-044   Error returned on regular expression match.

Explanation: LoadLeveler encountered an error while trying to match a regular expression that is being used as a **By User**, **By Machine**, or **By Group** job selection filter.

User Response: Try setting the job selection filter again. You may need to modify the regular expression you enter.

2539-046   Error receiving job data.

Explanation: A request for job information has been unsuccessful. Any data that was returned may be incomplete.

User Response: Reissuing the command, or refreshing the **Jobs** window, may resolve the problem. If the problem persists, then try exiting and reinvoking **xloadl**.

2539-047   Cannot read machine information from central manager.

Explanation: An error occurred while the central manager was sending machine information to **xloadl**.

User Response: Redo the action.

2539-048   Could not send command to cm host.

Explanation: **xloadl** can connect to the central manager, but cannot send the central manager a command.

User Response: Consult the preceding error message for the reason for the failure.

2539-049   Could not connect to *daemon_name* **on** *hostname*. **Will reconfig xloadl and retry.**

Explanation: On the first failure to contact a daemon, **xloadl** will reconfig itself and try to contact the daemon again. The cluster may have been reconfigured since **xloadl** was invoked.

User Response: No action is needed.

2539-050   Could not connect to *daemon_name* **on** *hostname*. **Will retry later.**

Explanation: The **Machines** window was not updated because the specified daemon was not contacted. Another attempt will be made after the automatic refresh interval.

User Response: No action is needed.

2539-051   Access to this job is denied.

Explanation: You cannot issue commands for this job.

User Response: Do not try to issue commands for this job.

2539-052   You do not own Job *job_id step_id*. **Access to this job denied.**

Explanation: You cannot issue commands for a job step that you do not own.

User Response: Contact the job owner or an administrator.

2539-053   Job *job_id step_id* **in System Hold. Access to this job denied.**

Explanation: You cannot access this job because a system hold has been put on it.

User Response: Contact the LoadLeveler administrator.

2539-054   Only the LoadLeveler administrator may order jobs.

Explanation: Only LoadLeveler administrators have the authority to order jobs using the **Favor Job** command.

User Response: Contact the LoadLeveler administrator.

2539-055   Unrecognized ORDER type *order_type*. No action taken.

Explanation: The order type is not valid for **Favor Jobs** or **Favor Users**.

User Response: Reissue the command; if the same message occurs, then exit from **xloadl** and restart it.

2539-057   Only the LoadLeveler administrator may order users.

Explanation: You do not have the authority to issue this command.

User Response: Only a LoadLeveler administrator can issue this command.

2539-058   Error receiving machine data.

Explanation: A request for machine information has been unsuccessful. Any data that was returned may be incomplete.

User Response: Reissuing the command, or refreshing the **Machines** window, may resolve the problem. If the problem persists, then try exiting and reinvoking **xloadl**.

2539-059   Only the LoadLeveler administrator may issue LoadLeveler control commands.

Explanation: You do not have the authority to do this action.

User Response: Only a LoadLeveler administrator has the authority to do this.

2539-060   Can not find name of executable for LoadL_master in config file.

Explanation: LoadLeveler did not find the name of the executable for **LoadL_master** in the configuration file.

User Response: Update the keyword **MASTER** in the configuration file (for example, **MASTER = $(BIN)/LoadL_master**), then reconfigure or restart LoadLeveler.

2539-062   No machines selected. No machines purged.

Explanation: At least one machine must be selected for a purge to occur.

User Response: Select at least one machine, then rerun the command.

2539-063   Could not get class information for *machine name*.

Explanation: Due to internal errors, no classes were returned for the specified machine.

User Response: Reissuing the command, or refreshing the **Machines** window, may resolve the problem. If the problem persists, then try exiting and reinvoking **xloadl**.

2539-064   Cannot obtain this host name. Job not submitted.

Explanation: The official hostname for this machine is not set.

User Response: Ensure the host name for this machine is set.

2539-067   User priority, *input*, is not valid. It is ignored.

Explanation: The value you typed in the text field for user priority is not valid.

User Response: Type a value between 0 and 100 into the user priority field.

2539-068   Previously set user priority value, *user_priority*, is used.

Explanation: The replacement user priority value is not valid, so the previously set value is used.

User Response: If you want to change the value, then type a value between 0 and 100 into the user priority field.

2539-069   **The maximum value for user priority, 100, is used instead of** *input_value*.

Explanation: The value you typed is greater than 100 (the maximum value for user priority), so the user priority has defaulted to 100.

User Response: If you want the user priority to be a value other than 100, then type a value between 0 and 100 into the user priority field.

2539-070   **min_processors value of** *num* **is not valid. It is ignored.**

Explanation: The value specified for **min_processors** is not valid. The value has defaulted to 1.

User Response: Enter a non-negative number in the **Min # of Nodes** field.

2539-071   **max_processors value of** *num* **is not valid. It is ignored.**

Explanation: The value specified for **max_processors** is not valid. The value has defaulted to 1.

User Response: Enter a non-negative number in the **Max # of Nodes** field.

2539-072   **Unrecognized job primary sort request:** *sort_type*.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart **xloadl**.

2539-073   **Unrecognized job secondary sort request:** *sort_type*.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart **xloadl**.

2539-074   **Unrecognized machine primary sort request:** *sort_type*.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart **xloadl**.

2539-075   **Unrecognized machine secondary sort request:** *sort_type*.

Explanation: The specified value is not recognized as a sort type.

User Response: Stop and restart **xloadl**.

2539-076   **Central manager is defined on** *machine_name*. **Cannot connect to LoadLeveler Central Manager.**

Explanation: The central manager is defined on the specified machine, but **xloadl** cannot connect to it.

User Response: Verify that the central manager is active.

2539-077   **Cannot find a central manager.**

Explanation: **xloadl** did not locate any central manager.

User Response: Exit and restart **xloadl**, then rerun the command. If no central manager is found when running the command, then contact your LoadLeveler administrator.

2539-078   **Entire Script may not have been saved.**

Explanation: The number of bytes that were saved is less than the number of bytes in the file.

User Response: Verify that there is enough space, then try to save the script again.

2539-079   **Unable to save Script. Error in creating tempfile.**

Explanation: The script could not be saved to a temporary file.

User Response: Verify that there is adequate space and permission to save a file to **/tmp**.

2539-080   **You are not a LoadLeveler Administrator. You cannot access Job** *machine_name job_id step_id***.**

Explanation: You need to be a LoadLeveler administrator to perform this task.

User Response: You cannot perform this task.

2539-081   **You do not have the needed admin privileges and you do not own this job. You cannot access Job** *machine_name job_id step_id***.**

Explanation: To perform this task you need to own the job or have sufficient privileges.

User Response: You cannot perform this task.

2539-082   **You do not have the needed admin privileges. You cannot access Job** *machine_name job_id step_id* **.**

Explanation: To perform this task, you need to have sufficient LoadLeveler, group or class administrative privileges.

User Response: You cannot perform this task.

2539-083   **No valid jobs selected. Command not sent.**

Explanation: The command was not executed because there were no valid jobs selected for it.

User Response: Select at least one job, then reissue the command. You may want to refresh the **Jobs** window before doing so to ensure that the status presented in the window is more up to date.

2539-084   **The length of the regular expression must be less than 1024 bytes.**

Explanation: Regular expressions entered in **xloadl** must be less than 1024 bytes long.

User Response: Enter a shorter regular expression.

2539-085   **Problem with regular expression,** *regular_expression* **:** *error_msg***.**

Explanation: *error_msg* describes a problem with the *regular expression*.

User Response: Use the message in *error_msg* to determine the cause of the error and correct it.

2539-086   **Problem with regular expression, regex.h error no. =** *error_code***.**

Explanation: The specified error code describes a problem with the regular expression.

Explanation: Consult **/usr/include/regex.h** for the error codes and their meanings.

2539-087   **Problem with regular expression: [***error message***].**

Explanation: The specified error message describes a problem with the regular expression.

User Response: Use the specified message to determine the cause of the error.

2539-088   **Both Tasks Per Node and Total Tasks are set. Total tasks is ignored.**

Explanation: You cannot have both **Tasks Per Node** and **Total Tasks** on a job step in you job command file. Both were set in the Build a Job window, so **Total Tasks** is ignored when the job command file is created.

User Response: Unset either **Total Tasks** or **Tasks Per Node**.

2539-089   **Min # of Nodes must be less than Max # of Nodes.**

Explanation: The value you have specified in the **Nodes** window is greater than that specified for **Max # of Nodes**.

User Response: Modify one of the values.

2539-090   **A range of nodes is not valid when Total Tasks is specified.**

Explanation: You have entered values for the **Min # of Nodes** and **Max # of Nodes**, as well as **Total Tasks**, in the **Nodes** window. A range of nodes is not valid when **Total Tasks** are specified.

User Response: Either modify the values so that the **Max # of Nodes** and **Min # of Nodes** are the same, or unset the values so that the conflict no longer exists.

2539-091   **Minimum number of nodes,** *field value*, **is not valid. It is ignored.**

Explanation: The value in the **Min # of Nodes** text field is not valid.

User Response: Change the value to an integer that is greater than zero.

2539-092   **Maximum number of nodes,** *field value*, **is not valid. It is ignored.**

Explanation: The value in the **Max # of Nodes** text field is not valid.

User Response: Change the value to an integer that is greater than the **Min # of Nodes**.

2539-093   **Tasks Per Node,** *field value*, **is not valid. It is ignored.**

Explanation: The value in the **Tasks per Node** text field is not valid.

User Response: Change the value to an integer that is greater than zero.

2539-094   **Total Tasks,** *field value*, **is not valid. It is ignored.**

Explanation: The value in the **Total Tasks** text field is not valid.

User Response: Change the value to an integer that is greater than zero.

2539-095   **Minimum number of processors,** *field value*, **is not valid. It is ignored.**

Explanation: The value in the **Min # of Processors** text field is not valid.

User Response: Change the value to an integer that is greater than zero.

2539-096   **Maximum number of processors,** *field value*, **is not valid. It is ignored.**

Explanation: The value for the **Max # of Processors** text field is not valid.

User Response: Change the value to an integer that is greater than the **Min # of Processors**.

2539-097   **Node Usage,** *field value*, **is not valid. It is ignored.**

Explanation: The value for the **Node Usage** text field is not valid.

User Response: Change the value in the **Node Usage** text field to either **shared**, or **not_shared**.

2539-098   **The number of nodes (***number of nodes***) exceeds the number of tasks (***number of tasks***).**

Explanation: The requested number of nodes cannot be greater than the requested total tasks.

User Response: Correct the job command file, then resubmit the job.

2539-099   **Hold,** *value for Hold field*, **is not valid. It is ignored.**

Explanation: The specified value is not valid.

User Response: Change the value to one of the following: user, system, or usersys.

2539-100   **Could not get adapter information for selected machines.**

Explanation: No details were returned for the selected machines.

User Response: Consult the preceding messages to find out why adapter information was not returned.

2539-101   **Open failed for file** *filename*, **errno =** *error_number*.

Explanation: The open system call failed for the specified file.

User Response: Verify that the directory exists, and that you have permission to access it and create a file.

2539-102   **Unable to write to file** *filename*.

Explanation: Could not write a line into the specified file.

User Response: Verify that the directory and file exist, and that you have permission to access them.

2539-103   **The length of the ckpt file full path name exceeds 255 characters:** *ckpt_file_full_ path_name*.

Explanation: The full path name for the ckpt file developed from **Ckpt File**, **Ckpt Dir**, and when needed the **ckpt_dir** of the class and current working directory, is longer than the 255 characters which can be handled by AIX.

User Response: Change the **Ckpt File** and **Ckpt Dir** to ensure the length of your file name is less than 255 characters.

2539-104   **Cannot start Checkpoint Monitor for** *job_step_name* **because java was not found.**

Explanation: No Java™ executable was found.

User Response: Ensure Java is located in the standard directory or that your $PATH environment variable points to it.

2539-105   **Cannot start Gang Matrix Monitor because java was not found.**

Explanation: No Java executable was found.

User Response: Ensure Java is located in the standard directory.

2539-106   **Large Page,** *value*, **is not valid. It is ignored.**

Explanation: The specified value is not valid.

User Response: Change the value to one of the following: ″N″ for no, do not use Large Page memory, ″Y″ for use Large Page memory if available; otherwise use regular memory, and ″M″ for mandatory use of Large Page memory.

2539-108   **Instances,** *value*, **is not valid. It is ignored.**

Explanation: The value you typed in the text field for instances is not valid.

User Response: Type a positive integer or the string ″max″ in the instances field.

2539-109   *name* **is not a configured** *job command file keyword* **name. Verify the** *job command file keyword* **statement before submitting the job.**

Explanation: Your file includes a *name* for the specified *job command file keyword* that is not known to LoadLeveler. The *name* is not defined in the current configuration and is not recognized.

User Response: Verify that the specified *name* for the *job command file keyword* is defined. The names are defined in the stanza labels in the **LoadL_admin** file.

2539-120   **Could not get classes for** *task name*.

Explanation: The classes that apply to the task you are trying to perform were not returned due to internal errors.

User Response: Consult the preceding messages for the reason.

2539-121   **The resource requirement** *resource* **must have a value greater than or equal to zero.**

Explanation: The value for the specified resource in your input file must be a positive integer that is greater than or equal to zero.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2539-122   **The value entered does not match an existing reservation ID.**

Explanation: The action requires an existing reservation ID. A value was entered that is not an existing reservation ID.

User Response: Select a reservation ID from the selection box.

2539-123   **Unable to create a temporary file.**

Explanation: The **mkstemp** library function cannot create a temporary file in the **/tmp** directory. A temporary file is required to prepare a job command file for viewing.

User Response: Verify that:
- The permissions in the **/tmp** directory allow files to be created
- There is sufficient space available in **/tmp** to create a file
- There is not already a file with the same name in **/tmp**

2539-124   **Error receiving reservation data.**

Explanation: A query request for reservation information has been unsuccessful. Any data that was returned may be incomplete.

User Response: Reissuing the command may resolve the problem. If the problem persists, try exiting and reinvoking **xloadl**.

2539-125   *bulkxfer_option* **is not a valid Bulk Transfer option. It is ignored.**

Explanation: The file specifies an unrecognized option for the **bulkxfer** keyword.

User Response: Specify a valid option. The choices are: **yes** and **no**.

2539-126   *copy_environment_option* **is not a valid Copy Environment option. It is ignored.**

Explanation: The file specifies an unrecognized option for the **copy_environment** keyword.

User Response: Specify a valid option. The choices are: **all** and **master**.

2539-130   **Adapter preference is not supported. It is ignored.**

Explanation: Your input contains a **preferences** line which has an unsupported **Adapter** preference in it, so the **preferences** line will be ignored.

User Response: Remove the **Adapter** preference from the input.

2539-131 **Cannot open file** *filename* **errno=**error num**. Using built-in defaults.**

Explanation: The **open** system call failed for the specified file. Defaults will be used in the **Build a Job** window, instead of information from your file.

User Response: Verify that the directory and file exist, and that the user has permission to access the directory.

2539-132 *notification option* **is not a valid notification option. It is ignored.**

Explanation: Your file specifies an unrecognized option for the notification keyword.

User Response: Specify a valid option. The choices are: **always**, **error**, **start**, **never**, and **complete**.

2539-133 *checkpoint option* **is not a valid checkpoint option. It is ignored.**

Explanation: Your file specifies an unrecognized option for the **checkpoint** keyword.

User Response: Specify a valid option. The choices are: **user_initiated**, **system_initiated**, and **no**.

2539-134 *restart option* **is not a valid Restart option. It is ignored.**

Explanation: Your file specifies an unrecognized option for the **restart** keyword.

User Response: Specify a valid option. The choices are: **yes** and **no**.

2539-135 **Requirements line in** *input file* **is not valid. It is ignored.**

Explanation: The **requirements** line specified in your file is not valid. The line is ignored, and its information is not displayed in the **Build a Job** window.

User Response: Verify that the line includes only the following keywords: **Memory**, **Feature**, **Machine**, **Disk**, **Arch**, **OpSys**, **Adapter**, **Pool**. The line must be in the form of a Boolean expression.

2539-136 **Adapter can only occur once in a valid Requirements line. The Requirements line is ignored.**

Explanation: A **requirements** line is not valid if it specifies more than one adapter.

User Response: Either rewrite the line so that it specifies only one adapter, or remove the **Adapter** preference from the **requirements** line, and use the **network** specification instead.

2539-137 **The** ″**Preferences**″ **line in** *input file* **is ignored because Adapter Preferences are not valid.**

Explanation: The **preferences** line specified in your file is not valid. The line is ignored, and its information is not displayed in the **Build a Job** window.

User Response: Remove **Adapter** from the **preferences** line.

2539-138 **Preferences line in** *input file* **is not valid. It is ignored.**

Explanation: The **preferences** line specified in your file is not valid. The line is ignored, and its information is not displayed in the **Build a Job** window.

User Response: Verify that the line includes only the following keywords: **Memory**, **Feature**, **Machine**, **Disk**, **Arch**, **OpSys**, **Pool**. The line must be in the form of a Boolean expression.

2539-139 *option* **is not a valid job type option. It is ignored.**

Explanation: Your file specifies an unrecognized option for the **job_type** keyword.

User Response: Specify a valid option. The choices are: **parallel** and **serial**.

2539-140   **Problem setting network** *network protocol* **from** *input file name*. **It is ignored.**

Explanation: There was a problem transforming the network information in your file into the **Build a Job** window.

User Response: Set the information in the **Network** window (for **mpi** or **lapi**).

2539-141   *network type* **is not a configured adapter name or valid network type. The network keyword is ignored.**

Explanation: Your file specifies an adapter name or network type that is not valid.

User Response: Verify that you have specified a valid adapter name or network type from the **Adapter** stanzas in the LoadLeveler administration file.

2539-142   *adapter_info* **is not a valid adapter usage, mode, level, or instance. It is ignored.**

Explanation: Your file specifies an adapter usage, mode, communication level, or instances in a **network** statement that is not valid.

User Response: Verify that you have specified a valid value. The choices for usage are: **shared** and **not shared**. The values for mode are: **IP** and **US**. The values for level are: **Low**, **Medium**, and **High**. The values for instances are positive integers.

2539-143   **The** *adapter usage or node* **keyword in** *filename* **is not supported by the job builder.**

Explanation: Your file specifies an unrecognized keyword; the keyword is ignored by the job builder.

User Response: Specify a valid value.

2539-144   **Cannot read the default file,** *xloadl default file*.

Explanation: Cannot open the specified file.

User Response: Check for various conditions: the file might not exist, the permissions might prohibit opening it, no file descriptors may be available, and so on. To change the defaults file, modify the **Xloadl** resource ″**skelfile**″.

2539-145   **Could not get details for selected class.**

Explanation: The information for the selected jobs was not returned.

User Response: Consult the preceding error messages for possible causes. If there are not any other messages, either attempt to run the command again, or run the **llclass -l** classname from the command line.

2539-146   **No Class Choices are available.**

Explanation: No classes were returned for display in the **Class Choices** selection box.

User Response: This message appears if no Classes are configured in the LoadLeveler administration file. Preceding error messages may indicate if a problem has occurred obtaining the data.

2539-147   **Cannot View this job.**

Explanation: No job command file information was returned for display by the Job Builder.

User Response: A file is created in the **/tmp** directory with a random name to hold this information. Check to see that the permissions in the **/tmp** directory allow this file to be read. If this file is empty, you will see this message.

2539-148   **No input to append from script file** *script file name*.

Explanation: No lines for appending were obtained from the script file you specified for ″Append Script″.

User Response: Preceding messages may give an indication of why the input was not available (problem opening or reading the file). If file is empty, you will see this message.

2539-149   **You must select or enter a value for the Adapter/Network Selection Box.**

Explanation: A network toggle has been turned on, but no Adapter/Network type, which is required, has been selected or entered in the Adapter/Network Selection Box.

User Response: Either turn off the network toggle, or select or enter a type from the Adapter/Network Selection Box.

2539-150   **The Adapter** *adapter name or network type* **in the Requirements line is ignored because there is already a network keyword in the job cmd file.**

Explanation: A **network** statement has already been restored into the **Build a Job** window. Because only one **network** keyword can be supported per step in a job command file, the **Adapter** statement will be ignored.

User Response: Do one of the following: 1) update your job command file so that it contains either a **network** keyword, or an **Adapter** requirement; or 2) verify that the **Network** window in the job builder reflects the adapter you wish to use.

2539-151   **The Adapter** *adapter name or network type* **in the Requirements line is ignored because it is not recognized.**

Explanation: The **Adapter** name referred to in the **requirements** line is not recognized. It must be an **Adapter** name or **network** type from an **Adapter** stanza in the administration file.

User Response: Set the **Adapter** using the **Network** window in the job builder.

2539-152   **The Adapter** *adapter name or network type* **in the Requirements line is ignored because it is not configured.**

Explanation: The **Adapter** type referred to in the **requirements** line is non-valid. It must be an **Adapter** name, or **network** type, from an **adapter** stanza in the administration file.

User Response: Set **Adapter/Network** in the **Network** window in the job builder.

2539-153   **The Requirements line is ignored because there is already a network keyword in the input file.**

Explanation: A **network** keyword has already been restored into the **Build a Job** window. Because only one requirements statement is supported in a job command file, the **Adapter** preference cannot be converted into a **network** keyword.

User Response: Either update your job command file so that it contains only one **network** keyword or **Adapter** requirement, or verify that the **Network** window in the job builder reflects the adapter you wish to use, then update the **Requirements** window as needed.

2539-154   **Cannot set both Adapter Requirement and Network.**

Explanation: There is already an **Adapter** preference on the **Requirements** line. Because only one or the other (**Adapter** requirement or **Network** keyword) is supported per step in any job command file, entering adapter information into the **Network** window is prevented. This message will only appear once.

User Response: If you wish to enter adapter information, then use the **Network** window.

2539-155   **The** *keyword* **keyword from your input file is not supported by the** *scheduler type* **scheduler. It is ignored.**

Explanation: The specified keyword from your job command file is not supported by the scheduler which is currently running. The keyword is ignored, and will not appear in the **Build a Job** window.

User Response: None.

2539-158   **The network statement in your input file is ignored because an Adapter Requirement was converted to a network statement.**

Explanation: While filling the **Build a Job** window fields from your input file, an **Adapter** keyword on the **Requirements** line was converted to a **network** keyword. Because only one of these two options (**Adapter** requirement/**network** statement) is supported per step in any job command file, the **network** statement is ignored.

User Response: Adjust the settings in the **Network** window, as needed.

2539-159   **This input file line contains non-ASCII characters,** *line*. **It will be ignored.**

Explanation: While filling Job Builder fields from your input file, non-ASCII characters have been encountered. Since only ASCII text is supported, this input line is ignored.

User Response: Adjust Job Builder fields as needed. Use files for input to the Job Builder that contain only ASCII characters.

2539-160   **The value for LL_Version is not valid because it must be quoted in the input file. It is ignored.**

Explanation: While filling Job Builder fields from your input file, a value for LL_Version that is not valid was found. Values for LL_Version in the job command file must be enclosed in double quotes to be valid. The LL_Version value is ignored, and will not appear in the Job Builder.

User Response: Update the LL_Version information in the Requirements or Preferences window of the Job Builder by entering the value without double quotes (double quotes are not used in the Job Builder), or add the double quotes to the input file to correct the LL_Version and reissue the Restore from file command.

2539-161   **Could not get consumable floating resources.**

Explanation: No floating resources were returned.

User Response: Consult additional messages for the reason floating resources were not returned.

2539-162   **Could not get consumable machine resources.**

Explanation: No machine resources were returned.

User Response: Consult additional messages for the reason machine resources were not returned.

2539-163   **A task ID is needed for Node** *node number*.

Explanation: You have not indicated a task ID for the specified node. Each node must have at least one task ID assigned to it.

User Response: Type a task ID into the input field for the specified node.

2539-164   **Task ID** *task ID number* **on Node** *node number* **is a duplicate.**

Explanation: The task ID specified for this node is already being used on another node. Each task ID must be assigned to one, and only one, node.

User Response: Verify that each task ID appears only once in the **Custom Geometry** window.

2539-165   **These task IDs are missing from the specified range:** *list of task ID numbers*.

Explanation: The listed task IDs fall within the range of task IDs that you specified in the **Task Geometry** window, but they have not been assigned to nodes.

User Response: You must assign the complete range (from 0 to n - 1, where n is the total number of tasks for your parallel job) of task IDs to nodes. For example, if you have entered task ID 6 into a Node field, then task IDs 0-5 must be assigned to nodes, as well.

2539-166   **For Task Geometry, task ID(s) have to be specified.**

Explanation: There are no task IDs specified for a node in the **Task Geometry** field. Task IDs must be unsigned integers specified within a single set of parentheses. Additional task IDs should be included within the same parentheses, but must be separated from each other by commas.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-167   **For Task Geometry, the expression must start with a ″{″.**

Explanation: The **Task Geometry** statement must start with a ″{″ (open brace), and end with a ″}″ (closed brace).

User Response: Correct the syntax error in the **Task Geometry** field.

2539-168   **For Task Geometry, the expression must end with a ″}″.**

Explanation: The **Task Geometry** statement must start with a ″{″ (open brace), and end with a ″}″ (closed brace).

User Response: Correct the syntax error in the **Task Geometry** field.

2539-169   **For Task Geometry, extra character(s) are found after ″}″.**

Explanation: The entire task-geometry statement must be enclosed within the ″{″ (open brace) and ″}″ (closed brace}.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-170   **For Task Geometry, left parenthesis cannot be nested.**

Explanation: The list of task IDs assigned to a node in the **Task Geometry** field must begin with a single open parenthesis. Nested parentheses are not allowed.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-171   **For Task Geometry, expected ″(″, but another character is encountered.**

Explanation: The list of task IDs assigned to a node must begin with the open parenthesis; the current list of task IDs begins with another character.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-172   **For Task Geometry, ″(″ is encountered without a corresponding ″)″.**

Explanation: All of the task IDs for a node in a task-geometry statement must be enclosed between parentheses.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-173   **For Task Geometry, task ID(s) have to be specified within parentheses.**

Explanation: Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-174   **For Task Geometry, the specification of task ID(s) within the parentheses is not valid.**

Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-175   **For Task Geometry, a task ID has to be an unsigned integer.**

Explanation: Task IDs must be unsigned integers, and must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-176   **For Task Geometry, the range of task IDs (0 -** *largest task ID***) is not complete.**

Explanation: Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero and end with a value that is one less that the total number of tasks in the parallel job.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-177   **For Task Geometry, duplicate task IDs are specified.**

Explanation: No task IDs can be specified more than once in the **Task Geometry** field.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-178   **For Task Geometry, a non-blank character is found between ")" and "}".**

Explanation: There should not be any characters between the closed parenthesis after the last of the task IDs assigned to a node and the curly brace that ends the task-geometry statement.

User Response: Correct the syntax error in the **Task Geometry** field.

2539-179   **Task_geometry,** *text in the task_geometry expression***, is not valid. It is ignored.**

Explanation: Task IDs must comprise a complete range of consecutive unsigned integers. The range must start with zero and end with a value that is one less that the total number of tasks in the parallel job. Task IDs must be specified within a set of parentheses; additional task IDs for a node must be included within the same parentheses and must be separated from each other by commas.

User Response: Type a valid value for task_geometry in the **Task Geometry** field.

2539-180   **Blocking,** *expression***, is not valid. It is ignored.**

Explanation: You have specified a value for **Blocking** which is not valid. The acceptable values are either a positive integer, or "unlimited."

User Response: Either enter a valid value in the **Blocking** field in the **Nodes** window, or correct the job command file; then reissue the **Restore From File** command from the **Tools** menu choice.

2539-181   **The value for blocking** *blocking* **exceeds the number of tasks** *tasks***.**

Explanation: The specified blocking factor is greater than the total number of tasks that have been requested.

User Response: Correct the values in the **Build a Job** window before you submit or save the job.

2539-182   **When** *keyword* **is specified,** *keyword* **must also be specified.**

Explanation: When the first keyword is specified, the second keyword must also be specified.

User Response: Correct the values in the **Build a Job** window.

2539-183   **The resources statement is not valid. It is ignored.**

Explanation: The value specified for resources in your input file is not valid.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2539-184   **The resource requirement** *resource* **does not have a value.**

Explanation: Your input file does not contain a value for the specified resource.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2539-185   **The resource requirement** *resource* **does not have a valid value:** *value***.**

Explanation: Your input file does not contain a value for the specified resource.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2439-186   **The resource requirement** *resource* **must have a value greater than zero.**

Explanation: The value for the specified resource in your input file must be a positive integer that is not zero.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2539-187   **The value of the resource requirement** *resource* **is not followed by a).**

Explanation: The value for the specified resource in your input file is not followed by a closing parenthesis. Resource requirement values must be enclosed by parenthesis.

User Response: Either enter a valid value into the **Resources** window, or update the resources expression in your input file, then reissue the **Restore From File** command from the **Tools** menu.

2539-188   **The consumable resource** *resource* **is not defined. It is ignored.**

Explanation: The specified resource in your input file is not defined in this LoadLeveler cluster.

User Response: All of the defined resources appear in the Resource window. If a new resource needs to be defined, then consult your LoadLeveler administrator.

2539-189   **Unexpected value** *value* **is found in input field for** *resource***.**

Explanation: The value in the specified input field is not a valid integer or integer-unit pair.

User Response: Correct the value in the input field. The value can be either an integer, or an integer followed by one of the following units: ″b″, ″w″, ″kb″, ″kw″, ″mb″, ″mw″, ″gb″, ″gw″, ″tb″, ″tw″, ″pb″, ″pw″, ″eb″, or ″ew″.

2539-190   **The value** *string* **in the input field for** *resource* **does not start with an integer.**

Explanation: The specified input field must contain a string that begins with a positive integer.

User Response: Verify that the input field begins with a positive integer.

2539-191   **Syntax error in resource requirement:** *value***.**

Explanation: The value in the specified input field is not a valid integer or integer-unit pair.

User Response: Correct the value in the input field. The value can be either an integer, or an integer followed by one of the following units: ″b″, ″w″, ″kb″, ″kw″, ″mb″, ″mw″, ″gb″, ″gw″, ″tb″, ″tw″, ″pb″, ″pw″, ″eb″, or ″ew″.

2539-192   **A value is required for Blocking Integer.**

Explanation: You have chosen the radio button indicating that you will enter a blocking factor expressed as an integer, but no value has been entered in the Integer field.

User Response: Enter a positive nonzero value into the Integer field.

2539-193   Cannot start LoadLeveler Wizard.

Explanation: A problem was encountered while attempting to start the LoadLeveler Wizard for Configuration Tasks from xloadl.

User Response: Contact your LoadLeveler administrator to verify that the setup for the wizard is correct.

2539-195   Cannot set a communication level with a communication mode of IP. It is ignored.

Explanation: A communication level was specified in a network statement which did not specify a mode of user space. Communication level is only valid on network statements which request user space.

User Response: Update the network information in the Network window of the Job Builder, as needed.

2539-196   *option* is not a valid Start From Ckpt option. It is ignored.

Explanation: Your file specifies an unrecognized option for the **restart_ckpt_file** keyword.

User Response: Specify a valid option. The choices are: **yes** and **no**.

2539-197   *option* is not a valid Same Nodes option. It is ignored.

Explanation: Your file specifies an unrecognized option for the **ckpt_same_nodes** keyword.

User Response: Specify a valid option. The choices are: **yes** and **no**.

2539-198   *option* is not a valid Save Ckpt File option. It is ignored.

Explanation: Your file specifies an unrecognized option for the **save_ckpt_file** keyword.

User Response: Specify a valid option. The choices are: **always** and **never**.

2539-199   More than one job is selected. Select only one and rerun the command.

Explanation: This command requires that just one job step is selected.

User Response: Select just one job step and rerun the command.

2539-200   The string *string_name* is not a valid consumable resource name.

Explanation: The name of a consumable resource can contain only alphanumeric characters or "_"

User Response: Redefine the consumable resource name.

Explanation: If the job step can be checkpointed, it must also be able to be restarted, so Restart is being reset to **yes**.

2539-201   The file *AFS_loadable_object_path* was not found. If this is a submit only machine using AFS then the file must exist.

Explanation: LoadLeveler uses a loadable object to store code for fetching and setting AFS tokens. LoadLeveler could not find the loadable object when attempting to load it.

User Response: Verify that the LoadLeveler AFS loadable object is installed, then repeat the command.

2539-231   Job Switch Resource Table could not be loaded on node *node_name* for the following reason:[*error message*].

Explanation: The Job Switch Resource Table for a job could not be loaded on the specified machine.

User Response: Correct the problem indicated by the error message.

2539-232   **Job Switch Resource Table could not be loaded on node** *node_name* **because the switch is in use and can not be freed.**

Explanation: The Job Switch Resource Table for a job could not be loaded on the specified machine because the switch is already in use and attempts to free the switch have failed.

User Response: Examine the switch table log in the **/var/adm/SP/logs/st/st_log** for the cause of the failure.

2539-233   **Job Switch Resource Table could not be loaded on node** *node_name* **due to a system error, st_load_table returned error** *return_code***.**

Explanation: The Job Switch Resource Table for a job could not be loaded on the specified machine because of a system error.

User Response: Examine the switch table log in **/var/adm/SP/logs/st/st_log** for the cause of the failure.

2539-234   **Job Switch Resource Table could not be loaded on node** *node_name* **due to an internal error, st_load_table returned error** *return_code***.**

Explanation: The **Job Switch Resource Table** for a job could not be loaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2539-235   **Job Switch Resource Table could not be unloaded on node** *node_name* **due to a system error, st_unload_table returned error** *return_code***.**

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine because of a system error.

User Response: Examine the switch table log in **/var/adm/SP/logs/st/st_log** for the cause of the failure.

2539-236   **Job Switch Resource Table could not be unloaded on node** *node_name* **due to an internal error, st_unload_table returned error** *return_code***.**

Explanation: The **Job Switch Resource Table** for a job could not be unloaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2539-237   **Job Switch Resource Table could not be unloaded on node** *node_name* **for the following reason: [error message].**

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine.

User Response: Correct the problem indicated by the error message.

2539-238   **Job Switch Resource Table could not be removed on node** *node_name* **due to a system error, st_clean_table returned error** *return_code***.**

Explanation: The Job Switch Resource Table for a job could not be removed on the specified machine because of a system error.

User Response: Examine the switch table log in **/var/adm/SP/logs/st/st_log** for the cause of the failure.

2539-239   **Job Switch Resource Table could not be removed on node** *node_name* **due to an internal error, st_clean_table returned error** *return_code***.**

Explanation: The Job Switch Resource Table for a job could not be unloaded on the specified machine because of an internal error.

User Response: Report the failure to IBM service.

2539-240   **Job Switch Resource Table could not be removed on node** *node_name* **for the following reason: [***error message***].**

Explanation: The Job Switch Resource Table for a job could not be removed on the specified machine.

User Response: Correct the problem indicated by the error message.

2539-241   **Could not determine status for switch adapter** *adapter_name* **. st_query_adapter failed with rc** *return_code*.

Explanation: The switch table service (**st_query_adapter**) failed to obtain and return the status of the switch. The switch will be treated as **NOT_READY**.

User Response: Correct the problem indicated by the return code.

2539-242   **Could not determine status for switch adapter** *adapter_name* **for the following reason: [***error message***].**

Explanation: The status of the switch could not be determined due to the indicated error. The switch will be treated as **NOT_READY**.

User Response: Correct the problem indicated by the error message.

2539-243   **Failed to route specification** *specification name* **(***specification number***).**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-244   **Failed to route expression for** *specification name* **(***specification number***).**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-245   **Internal error, cannot find tree for configuration type** *configuration type*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-246   **Unknown stanza type** *configuration type*.

Explanation: A value has been defined for the specified stanza type that is not valid.

User Response: Verify that the stanzas in the LoadLeveler administration file are correct.

2539-247   **Cannot make a new stanza of type** *stanza type*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-248   **Error refreshing** *stanza name* **stanza with defaults.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-249   **Error merging** *first stanza name* **stanza with** *second stanza name* **stanza.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-250   **Error inserting intlist. Element is not an array.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-251   **Error inserting stringlist. Element is not an array.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-252   **Error writing stanza** *stanza name***.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-253   **Cannot write config file** *config file name***.**

Explanation: LoadLeveler failed to write to the configuration file.

User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-254   **Cannot write final record for file** *file name***.**

Explanation: LoadLeveler failed to write to the specified file.

User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-255   **Verify is not implemented for the** *stanza name* **stanza.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-256   **Error writing stanza type** *stanza type***.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-257   **Error reading file** *file name***.**

Explanation: LoadLeveler failed to read the user's preferred configuration file.

User Response: Verify that the specified file exists, and that it has the appropriate access permissions.

2539-261   **Unable to obtain name of operating system from configuration file.**

Explanation: LoadLeveler cannot find the value for **OpSys** in the configuration file.

User Response: Define a value for **OpSys**.

2539-262   **Error processing config file** *configuration file name* **at line** *line number***.**

Explanation: LoadLeveler failed to parse the configuration file.

User Response: Examine the configuration file syntax at the specified line number.

2539-263   **Local configuration file not specified in LoadL_config. Proceeding...**

Explanation: No local LoadLeveler configuration file was defined in the global LoadLeveler configuration file.

User Response: Define local LoadLeveler configuration files on machines which are meant to override defaults in the global LoadLeveler configuration file.

2539-264   **Error processing local configuration file** *file name***! Proceeding ...**

Explanation: LoadLeveler failed to process the local LoadLeveler configuration file. Values will be used from the global LoadLeveler configuration file, instead.

User Response: Examine the local LoadLeveler configuration file's syntax.

2539-265   **The above line in config file is too long. It must be less than 2048 bytes.**

Explanation: The identified line is too long.

User Response: Keep individual line lengths under 2K bytes.

2539-266   **Exiting ...**

Explanation: The specified program is exiting.

User Response: Refer to the previous error messages to determine the cause.

2539-267   **Error in configuration file** *file name***, line** *line number***: Illegal identifier:** *illegal string***.**

Explanation: There is a syntax error in the configuration file.

User Response: Examine the specified line number to find the error.

2539-268   **Attention:** *keyword* **keyword from local configuration file,** *filename***, will be ignored.**

Explanation: LoadLeveler encountered a keyword that is not valid.

User Response: Examine the configuration file for keywords that are not valid.

2539-272   **Attention: Line length is greater than 8191 bytes. Input data may be truncated.**

Explanation: A line in the configuration file is longer than 8191 bytes.

User Response: Check the configuration file for lines that are longer than 8191 bytes.

2539-273   **Error in configuration file** *file name* **, line** *line number***: Syntax error.**

Explanation: The specified line in the configuration file contains a syntax error.

User Response: Check the specified line number for errors.

2539-274   **gethostname routine failed, errno =** *errno***.**

Explanation: The **gethostname** system call failed.

User Response: Correct the problem indicated by the error number. If the problem persists, contact IBM Service.

2539-275   **host.domain string length exceeds** *length***.**

Explanation: A domain name has a length that is not valid in the LoadLeveler administration file.

User Response: Verify that the machine domain names in the LoadLeveler administration file are correct.

2539-276   **Unable to calloc** *number of bytes* **bytes for new hostent h_aliases array.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-277   **Unable to re-allocate** *number of bytes* **bytes for new hostent h_aliases array.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-278   **Unable to calloc** *number of bytes* **bytes for new hostent h_addr_list array.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-279   **Unable to re-allocate** *number of bytes* **bytes for new hostent h_aliases array.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-280   **Unable to malloc** *number of bytes* **bytes for interface address array.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-287   **The value** *pool_list value* **is invalid for pool_list in the** *machine name* **machine stanza. Ignored.**

Explanation: The specified value is not valid.

User Response: Verify that the stanzas in the LoadLeveler administration file are correct.

2539-288   **The negative number** *pool_list value* **found in pool_list of the** *machine name* **machine_stanza is not allowed. Ignored.**

Explanation: The specified value is not valid.

User Response: Do not use negative numbers in a machine pool list.

2539-290   **Feature statement with** *number of characters* **characters exceeds limit of 1024.**

Explanation: A feature statement in the configuration file is too long.

User Response: Do not allow configuration file feature lines to exceed 1024 bytes.

2539-291   **Feature values are not set.**

Explanation: Feature values will not take effect due to syntax errors.

User Response: Consult the preceding error message for more information.

2539-292   **Class statement with** *number of characters* **characters exceeds limit of 1024.**

Explanation: A class statement is too long.

User Response: Do not specify class stanzas longer than 1024 bytes.

2539-293   **Default No_Class assumed.**

Explanation: A default class value of **No_Class** will be used.

User Response: Consult the preceding error message for more information.

2539-294   **Attention: Invalid format found for class statement. Missing braces.**

Explanation: A class statement has incorrect syntax.

User Response: Refer to *LoadLeveler: Using and Administering* for a description of the correct syntax.

2539-295   **Attention: Invalid format found for class statement. Missing double quotes.**

Explanation: A class statement has incorrect syntax.

User Response: Refer to *LoadLeveler: Using and Administering* for a description of the correct syntax.

2539-299   **A value of** *value* **was specified for max_adapter_window in the** *stanza_type* **stanza. Valid values are** ″**1 - 4**″ **inclusive. Default value of** ″**4**″ **will be used.**

Explanation: A default value of **4** will be used in place of a user-supplied value for **max_adapter_window** in the specified stanza.

User Response: Refer to *LoadLeveler: Using and Administering* for proper value ranges.

2539-300   **An adapter stanza name of** *adapter stanza name* **was specified in the** *machine stanza name* **machine stanza, but an adapter stanza with that name does not exist.**

Explanation: A machine stanza referenced a nonexistent adapter stanza.

User Response: Machine stanzas should refer only to *existing* adapter stanzas.

2539-302   **Attention: A value for both SCHEDULER_TYPE and SCHEDULER_API has been specified. SCHEDULER_TYPE will be used.**

Explanation: Two conflicting keywords (**SCHEDULER_TYPE**, and **SCHEDULER_API**) were used in the configuration file.

User Response: Of the two keywords, only use **SCHEDULER_TYPE** in the configuration file.

2539-303   **DCE_AUTHENTICATION is not valid. DCE authentication will not be transmitted with job.**

Explanation: **DCE_AUTHENTICATION** is not a valid keyword.

User Response: Do not specify **DCE_AUTHENTICATION**.

2539-304   **The configuration keyword** *keyword name* **contains the invalid value** *keyword value* **. The default value will be used instead.**

Explanation: A keyword value has been specified incorrectly.

User Response: Refer to *LoadLeveler: Using and Administering* for correct values.

2539-305   **More than one stanza identified as** *stanza name* **has been found. The first stanza in the LoadL_admin file will be used. All others having the same name will be ignored.**

Explanation: Duplicate stanzas were specified in the LoadLeveler administration file.

User Response: Verify that all LoadLeveler administration file stanzas have unique names.

2539-306   *keyword* **specified in default** *stanza type* **stanza. Ignored.**

Explanation: The identified keyword should not be specified in the default stanza.

User Response: Refer to *LoadLeveler: Using and Administering* for LoadLeveler administration file stanza syntax.

2539-307   **Attention: Unknown keyword** *keyword* **in** *stanza type* **stanza** *stanza name*. **Ignored.**

Explanation: The specified stanza contains an unknown keyword.

User Response: Refer to *LoadLeveler: Using and Administering* for LoadLeveler administration file stanza syntax.

2539-308   **Attention: Invalid value entered for spacct_excluse_enable for machine stanza** *machine name*. **Default value will be used.**

Explanation: The specified machine stanza contains a incorrect value for **spacct_excluse_enable**.

User Response: Refer to *LoadLeveler: Using and Administering* for correct values.

2539-309   **Attention: Value missing for** *keyword* **keyword in** *stanza type* **stanza.**

Explanation: A stanza was defined without the specified keyword.

User Response: Ignore this message if you do not wish to define the associated keyword for this stanza; otherwise, add the keyword, then reconfigure LoadLeveler.

2539-310   **Attention: Invalid value for** *keyword* **in LoadL_admin file:** *keyword value.*

Explanation: The specified keyword's value is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for correct values.

2539-311   **RESERVED KEYWORD USED: The reserved keyword** *keyword* **has been used as a class name. LoadLeveler may not function properly with this reserved keyword used as a class name.**

Explanation: A LoadLeveler reserved keyword was used as the name of a job class.

User Response: Refer to *LoadLeveler: Using and Administering* for a list of reserved keywords, and verify that no job classes use reserved keywords as names.

2539-312   **Attention: A value for keyword** *keyword* **is required for stanza** *stanza name*. **Stanza is ignored.**

Explanation: A required keyword is missing from the specified stanza.

User Response: Add the required keyword to the specified stanza, then reconfigure LoadLeveler.

2539-313   **Attention: A css adapter was specified for adapter:** *adapter stanza name* **but no switch_node_number was found. Default value will be used.**

Explanation: No **switch_node_number** was associated with the specified adapter stanza. A default value will be used.

User Response: If you do not want to use the default value, then specify **switch_node_number** for the specified adapter stanza.

2539-314   **Duplicate central manager specified. Stanza for machine** *machine name* **will be ignored.**

Explanation: The specified machine was defined as a duplicate central manager.

User Response: Define only one machine stanza in the LoadLeveler administration file with **central_manager = yes**.

2539-315   **RM_HOST ignored for machine stanza** *machine name***.**

Explanation: The keyword **rm_host** was used in a machine stanza, but it is obsolete.

User Response: Do not use the **rm_host** keyword any longer. Refer to *LoadLeveler: Using and Administering* for update information about parallel job scheduling.

2539-316   **Attention: The keyword adapter_stanzas is used but no value is specified in stanza** *machine name***.**

Explanation: The specified keyword has no value.

User Response: Either specify an appropriate value for the keyword, or remove the keyword, then reconfigure LoadLeveler.

2539-317   **Cannot specify submit_only for a central manager.**

Explanation: The **submit_only** keyword was set to **true** for a central manager machine.

User Response: Do not define a primary or alternate central manager as a submit-only machine.

2539-318   **Alias specified in default machine stanza. Ignored.**

Explanation: An alias was defined for the default machine stanza.

User Response: Only define aliases for stanzas that are associated with real machines.

2539-319   **central_manager specified in default machine stanza. Ignored.**

Explanation: The default machine stanza was defined as a central manager.

User Response: Only define real machines as central managers.

2539-320   **No central manager defined in LoadL_admin machine list.**

Explanation: The primary central manager has not been defined for this cluster.

User Response: Define one primary central manager for your LoadLeveler cluster. This is the only required field in the LoadLeveler administration file.

2539-321   *resource limit name* **resource limit has a value that is too long:** *value*

Explanation: The specified resource limit has a syntax error.

User Response: Refer to *LoadLeveler: Using and Administering* for correct resource limit values.

2539-322   **Invalid stanza** *stanza name***. Ignored.**

Explanation: The specified stanza has a type that is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for correct LoadLeveler administration file stanza types.

2539-323   **Unable to obtain** *resource limit name* **resource limit.**

Explanation: The **getrlimit** system call failed for the indicated resource limit.

User Response: Verify that the resource limit name is correct. If the name is correct, report the machine that issued the error to IBM Service.

2539-324   **Unable to create central manager list, no machine list provided.**

Explanation: A list of central managers cannot be created because there are no machine stanzas in the LoadLeveler administration file.

User Response: Define at least one machine as the primary central manager in the LoadLeveler administration file.

2539-325   **Unable to find a central manager in the LoadL_admin file.**

Explanation: No central manager machine stanza exists in the LoadLeveler administration file.

User Response: In the LoadLeveler administration file, define at least one machine as the primary central manager.

2539-326   **Job Switch Resource Table could not be loaded because the switch node number for node** *node name* **is invalid or has not been set.**

Explanation: The switch node number is not set in the file **/spdata/sys1/st/switch_node_number** or the number in the file is not valid.

User Response: Run the command **/usr/lpp/ssp/bin/st_set_switch_number** to set the switch node number.

2539-327   **An invalid FEATURE statement in the configuration file was found.**

Explanation: There is a syntax error in a **FEATURE** keyword in the configuration file.

User Response: Check the syntax of each feature statement in the configuration file; verify that each feature has a pair of double quotes surrounding it. Refer to *LoadLeveler: Using and Administering* for more information on the syntax of the feature statement.

2539-328   **An invalid CLASS statement in the configuration file was found.**

Explanation: There is a syntax error in a **CLASS** keyword in the configuration file.

User Response: Check the syntax of each class statement in the administration file; verify that each class has a pair of double quotes surrounding it. Refer to *LoadLeveler: Using and Administering* for additional information.

2539-329   **Attention: Default stanzas for adapters are obsolete. Values specified in ″default adapter stanzas″ are ignored.**

Explanation: Default adapter stanzas are no longer supported for adapter stanzas.

User Response: Default values specified in a default adapter stanza are not applied to other adapter stanzas. Remove the default adapter stanza.

2539-330   **Attention: The** *switch name* **switch adapter,** *adapter name***, must have a css_type of** *value***.**

Explanation: For an adapter with the specified **adapter_name**, the **css_type** must be the specified value.

User Response: You must change the **css_type** value to the specified value, then reconfigure LoadLeveler; otherwise, this stanza will be ignored.

2539-331   **The** *adapter stanza or css_type value* **is ignored.**

Explanation: Either the adapter stanza, or the **css_type** is ignored.

User Response: Consult the preceding error message for more information.

2539-332   **Attention: The css_type value was specified for the switch adapter,** *adapter stanza***, is not valid.**

Explanation: The specified adapter's **css_type** value was not valid.

User Response: Specify a valid **css_type** value, then reconfigure LoadLeveler. Refer to *LoadLeveler: Using and Administering* for the appropriate values.

2539-333   **Attention: A css_type value was not specified for the switch adapter:** *adapter stanza*.

Explanation: All switch adapters must have the **css_type** keyword specified with an appropriate value.

User Response: Specify a valid**css_type** value, then reconfigure LoadLeveler. Refer to *LoadLeveler: Using and Administering* for the appropriate values.

2539-334   **Defaulting css_type to:** *default_css_type*.

Explanation: A **css_type** value was not specified for a switch adapter. LoadLeveler will use the specified default value.

User Response: Enter a **css_type** value for the switch adapter in the LoadLeveler administration file.

2539-335   **Attention: The switch name of** *adapter_name* **was specified for adapter,** *adapter stanza*, **and is not valid.**

Explanation: An incorrect switch name was specified.

User Response: You must specify a valid switch name, then reconfigure LoadLeveler; otherwise, this stanza will be ignored.

2539-336   **Attention: The css_type keyword specified in adapter stanza,** *adapter stanza*, **is not valid for non-switch adapters.**

Explanation: The **css_type** is not needed for non switch adapters.

User Response: Remove the **css_type** keyword from the adapter stanza, then reconfigure LoadLeveler.

2539-337   **The machine stanza** *machine stanza* **lists more than one adapter with the same adapter_name of** *adapter_name*. **Adapter stanza** *adapter_stanza* **is ignored.**

Explanation: A machine cannot reference more than one adapter stanza of the same name.

User Response: Remove one of the adapter stanzas listed for that machine.

2539-338   **There is a consumable resource without a value:** *value*.

Explanation: This message is self-explanatory.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-339   **There is a consumable resource with a wrong value:** *value*.

Explanation: This message is self-explanatory.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-340   **There is a consumable resource without units:** *units*.

Explanation: This message is self-explanatory.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-341   **There is a floating resource with a wrong value:** *value*.

Explanation: This message is self-explanatory.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-342   **There are more than one consumable resource with same name:** *value***.**

Explanation: This message is self-explanatory.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-343   *resource* **can not be a** ″**FLOATING_RESOURCE**″

Explanation: **ConsumableCpus**, **ConsumableMemory** and **ConsumableVirtualMemory** can only be defined as machine resources, which are specified in the LoadLeveler administration file.

User Response: Check the LoadLeveler configuration and administration files for the specified resource, remove it from the global configuration file, and reconfigure LoadLeveler.

2539-344   **Could not create a striped adapter.**

Explanation: A striped adapter was requested at job submission but could not be created.

User Response:

2539-345   **Could not find a striped adapter.**

Explanation: A striped adapter was requested at job submission but does not exist.

User Response: Ensure your LoadLeveler environment has a striped adapter.

2539-346   **The** *keyword* **keyword will be ignored.**

Explanation: Since one or more errors were reported in previous messages regarding this keyword, the keyword and all its specified resources and their values will be ignored.

User Response: Check the LoadLeveler global configuration and administration files for the specified resource, modify its value, and reconfigure LoadLeveler.

2539-347   **The keyword** *keyword* **contains an out of range value** *value***.** *default_value* **will be used instead.**

Explanation: The value of the specified keyword is out of range.

User Response: Refer to *LoadLeveler: Using and Administering* for correct values.

2539-348   **The reserved word specified for the ENFORCE_RESOURCE_USAGE keyword must be defined in the SCHEDULE_BY_RESOURCES keyword. No resources will be enforced.**

Explanation: A resource was defined in the **ENFORCE_RESOURCE_USAGE** keyword that was not defined in the **SCHEDULE_BY_RESOURCES** keyword.

User Response: Redefine the resources for **ENFORCE_RESOURCE_USAGE** keyword.

2539-349   **The** ″**deactivate**″ **reserved word cannot be specified with any other reserved words in the ENFORCE_RESOURCE_USAGE keyword. No resources will be enforced and WLM will not be deactivated.**

Explanation: The **deactivate** keyword was specified with other resources for the **ENFORCE_RESOURCE_USAGE** keyword.

User Response: Redefine the resources for the **ENFORCE_RESOURCE_USAGE** keyword.

2539-350   **ENFORCE_RESOURCE_USAGE resource** *resource_name* **cannot be enforced. No enforcement of any resources will be done.**

Explanation: Only **ConsumableCpus**, **ConsumableMemory** or **deactivate** can be specified for the **ENFORCE_RESOURCE_USAGE** keyword.

User Response: Redefine the resources for the **ENFORCE_RESOURCE_USAGE** keyword.

2539-351 **The ENFORCE_RESOURCE_USAGE keyword already has** *reserved_word* **defined. This definition will be ignored.**

Explanation: A reserved word was specified more than once for the **ENFORCE_RESOURCE_USAGE** keyword.

User Response: Redefine the resources for the **ENFORCE_RESOURCE_USAGE** keyword.

2539-352 **The ALL reserved word is not valid with the resource** *resource_name***.**

Explanation: The resource name specified does not support the **ALL** reserved word.

User Response: Redefine the machine **resources** keyword.

2539-353 *value* **is an incorrect value for keyword** *keyword***.**

Explanation: This value is not one of the valid values allowed for this keyword.

User Response: Specify a valid value for the keyword.

2539-354 **Circular preemption detected for class** *class_name* **under** *schedule_type* **scheduling.**

Explanation: If a class preempt itself after applying the preemption rules repeatedly, then it is circular preemption which is not permitted. If this message is displayed for class **allclasses**, it means that two or more **PREEMPT_CLASS** rules contain "ALL {allclasses}" which is also circular preemption.

User Response: Remove circular preemption from preemption rules.

2539-355 **Error processing configuration file** *filename***.**

Explanation: A severe error is encountered while processing the configuration file. The configuration process is stopped.

User Response: Correct the errors in the configuration file and try again. **llctl reconfig** or **llctl stop** may provide more details about the error than **llctl start** in certain situations.

2539-356 *keyword_name*=*keyword_value* **is not valid under** *schedule_type* **scheduling.**

Explanation: The value of the specified keyword is not valid for this scheduler.

User Response: Specify a valid keyword value for this scheduler.

2539-357 **The following error(s) occurred while processing** *error_list***...**

Explanation: The processing of the information encountered errors/problems.

User Response: See the messages following this message for more information.

2539-358 **Redundant and/or incorrect information found in the above statement. It is ignored.**

Explanation: Errors were found processing information in message 2539-357. The statement is ignored. Example: **START_CLASS[allclasses]** and **PREEMPT_CLASS[allclasses]** configuration statements are incorrect as **allclasses** is not allowed in the left hand side of those statements.

User Response: Correct the errors in the original input.

2539-359 **Syntax error - expected** *value1* **and found** *value2* **instead.**

Explanation: Syntax errors were found processing information in message 2539-357.

User Response: Correct errors in the original input.

2539-360   *value* **is not a valid integer. The value will be interpreted as** *value2***.**

Explanation: A string that should have represented an integer was parsed but errors were found. The value that the string will be interpreted as is displayed in the message. An integer must be a contiguous string of digits, optionally preceded by whitespace and at most one sign and optionally followed by whitespace.

User Response: Correct errors in the original input.

2539-361   *string* **is not a valid number pair. The value will be interpreted as** *value1,value2***.**

Explanation: A string that should have represented two integers separated by a comma was parsed but errors were found. The value that the string will be interpreted as is displayed in the message. An integer must be a contiguous string of digits, optionally preceded by whitespace and at most one sign and optionally followed by whitespace.

User Response: Correct errors in the original input.

2539-362   **The previous message refers to the** *keyword* **keyword.**

Explanation: A message was displayed while parsing the value for the specified keyword. This message serves to identify the keyword to which the previous message applies.

User Response: Refer to the previous message for more information.

2539-363   **The string** *string_name* **of** *resource name* **is not a valid consumable resource name.**

Explanation: The name of a consumable resource can contain only alphanumeric characters or "_"

User Response: Redefine the consumable resource name.

2539-364   **The string** *string_name* **associated with the** *keyword_name* **keyword of** *resource_type* **contains invalid data.**

Explanation: Resource information specified does not have the format: **name(value units) ... name(value units)**.

User Response: Redefine the consumable resource specification.

2539-365   **The resource name** *resource_name* **of** *resource_type* **has already been defined as a floating resource.**

Explanation: Resource name specified is a duplicate of a previously defined floating resource.

User Response: Redefine the consumable resource name.

2539-366   **The consumable resource** *resource_name* **of** *resource_type* **is specified more than once.**

Explanation: The resource name is specified multiple times in the same statement.

User Response: Redefine the consumable resource name.

2539-367   **The value specified for the consumable resource** *resource_name* **of** *resource_type* **is not a valid specification.**

Explanation: The resource value assigned to a given resource is not valid. It must be a positive number.

User Response: Redefine the consumable resource value.

2539-368   **The** *keyword_name* **keyword of** *resource_type* **contains one or more errors.**

Explanation: Resource information specified does not have the format: **name(value units) ... name(value units)**.

User Response: Redefine the consumable resource specification.

2539-369 **The name** *resource_name* **has already been defined as a resource name in a LoadLeveler machine stanza.**

Explanation: Resource name specified is a duplicate of a previously defined resource name of a machine stanza.

User Response: Redefine the consumable resource name.

2539-370 **The keyword** *keyword1* **is not compatible with the keyword(s)** *keyword2*

Explanation: The keyword indicated by *keyword1* cannot be used with the keyword or keywords indicated by *keyword2*.

User Response: Update the file in error, then reconfigure LoadLeveler.

2539-381 **Unable to malloc** *num* **bytes for Security credentials file.**

Explanation: The program could not allocate virtual memory for the credentials file for the security mechanism in use.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-382 **Cannot read** *filename*. **Cannot fetch DCE security credentials.**

Explanation: LoadLeveler cannot read the specified DCE credentials file.

User Response: Verify that the permissions on the files and credentials cache are appropriate.

2539-383 **Cannot open** *filename*. **Cannot fetch DCE security credentials.**

Explanation: LoadLeveler cannot open the specified DCE credentials file.

User Response: Verify that the permissions on the files and credentials cache are appropriate.

2539-384 **Cannot open directory** *directory_name*. **Cannot fetch DCE security credentials.**

Explanation: LoadLeveler cannot open the directory containing the DCE credentials files.

User Response: Verify that the permissions on the credentials cache and on the specified directory are appropriate.

2539-386 **Unable to malloc** *num* **bytes for opaque object.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-387 **Unable to create opaque credentials object.**

Explanation: LoadLeveler cannot martial DCE credentials into XDR format.

User Response: Contact IBM Service.

2539-388 **DCE_AUTHENTICATION_PAIR keyword is not valid.**

Explanation: An incorrect keyword was entered.

User Response: Correct the specified keyword in the LoadLeveler configuration file.

2539-389   **Cannot spawn new GetDce Process. errno -** *error_num***.**

Explanation: LoadLeveler cannot fork and execute the **llgetdce** process to fetch DCE credentials.

User Response: Correct the problem indicated by the error number.

2539-390   **Unable to read length of opaque object from process pipe, read returned** *return_code***.**

Explanation: The **llsubmit** command could not read the length of the DCE credentials fetched by the **llgetdce** process.

User Response: Contact IBM service.

2539-391   **Unable to malloc** *num* **bytes for opaque object.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-392   **Unable to read opaque object from process pipe, read returned** *return_code***.**

Explanation: The **llsubmit** command cannot read the DCE credentials fetched by the **llgetdce** process.

User Response: Contact IBM service.

2539-393   **Unable to read stderr from child, read returned** *return_code***.**

Explanation: LoadLeveler failed to read from the **stderr** pipe when attempting to get to the **llgetdce** process.

User Response: This problem requires the attention of an administrator.

2539-394   **Failed to write size of opaque object (***object_size***) to stdout, errno =** *error_num***.**

Explanation: The opaque object contains DCE credentials fetched by the **llgetdce** process.

User Response: Contact IBM service.

2539-395   **Failed to write opaque object to stdout, errno =** *error_num***.**

Explanation: The opaque object contains DCE credentials fetched by the **llgetdce** process.

User Response: Contact IBM service.

2539-396   **The DCE principal of this daemon,** *DCE principal name of daemon***, is not a member of the LoadLeveler DCE services group** *LoadLeveler DCE services group***.**

Explanation: This message is self-explanatory.

User Response: DCE login as ″cell_admin″ and add the DCE principal name of this daemon to the LoadLeveler DCE services group.

2539-397   **The environment variable KRB5CCNAME is not in the correct format of** ″**FILE:/dce credentials cache directory**″**.**

Explanation: The referenced environment variable is not in the correct format.

User Response: Correct the KRB5CCNAME environment variable for user.

2539-416   **User failed username security validation. Username did not match expected name,** *expected username*.

Explanation: The user name did not match the primary LoadLeveler user name (for example, ″**loadl**″).

User Response: Ensure that **/etc/LoadL.cfg** contains the same LoadLeveler user name for all of the machines in the cluster.

2539-417   **Cannot receive hostname from client.**

Explanation: LoadLeveler failed to receive the hostname from the connecting host. This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-418   **Cannot send hostname.**

Explanation: LoadLeveler failed to send the hostname to another host. This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-419   **Attention: Host name returned by validate_connection (***hostname***) does not match caller host name (***host name***).**

Explanation: The name server returned a different name for this host than the name that was expected. Processing continues.

2539-420   **Connection from** *hostname* **rejected; not in machine list.**

Explanation: The specified host failed validation because **MACHINE_AUTHENTICATE** is set to **TRUE**, and the host is not in the LoadLeveler administration file.

User Response: If you want the host to participate in the LoadLeveler cluster, then add a machine stanza to the LoadLeveler administration file.

2539-421   **Cannot receive remote host name (***IP address* **port** *port number***) errno =** *error num*

Explanation: **gethostbyaddr()** system call failed for the specified IP address.

User Response: Either set **MACHINE_AUTHENTICATE** to **FALSE** (to allow all hosts to participate), or verify the validity of the IP address.

2539-422   **ProtocolReset: Cannot send protocol version.**

Explanation: This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-423   **ProtocolReset: Cannot send machine name.**

Explanation: LoadLeveler failed to send the host name. This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-424   **Cannot send step** *job step name***.**

Explanation: This is an internal LoadLeveler routing error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-425   **Cannot send end of record for step** *job step name*.

Explanation: LoadLeveler failed to send the transaction end-of-record marker.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-426   **Cannot send step id** *job step name*.

Explanation: LoadLeveler failed to send the job step ID.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-427   **Error receiving acknowledgment for step** *job step name*.

Explanation: LoadLeveler failed to receive transaction acknowledgement for a job step.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-428   **ProtocolReset: Cannot receive protocol version.**

Explanation: LoadLeveler cannot receive the protocol version from the connecting machine.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-429   **ProtocolReset: Cannot receive machine name.**

Explanation: LoadLeveler cannot receive the name of a connecting machine.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-430   **Attention: Routing default machine.**

Explanation: Routing an entire machine object rather than transaction-specific machine data.

2539-431   **Unrecognized specification:** *specification name* (*specification value*)

Explanation: LoadLeveler encountered erroneous machine data.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-432   **Invalid value defined in the** *stanza type* **stanza** *stanza name* **for** *keyword = value*.

Explanation: The specified keyword has an incorrect value.

User Response: Verify that the LoadLeveler administration file stanzas are correct.

2539-433   **Invalid keyword** *keyword* **specified in the** *stanza type* **stanza** *stanza name*.

Explanation: The specified keyword is not valid.

User Response: Verify that the LoadLeveler administration file stanzas are correct.

2539-434   **The** *keyword* **keyword specified in the** *stanza type* **stanza** *stanza name* **cannot be NULL.**

Explanation: The specified keyword has an incorrect **NULL** value.

User Response: Verify that the LoadLeveler administration file stanzas are correct.

2539-435   **Cannot append to** *keyword* **in the** *stanza_name stanza_type* **stanza.**

Explanation: LoadLeveler failed to append a value to a keyword in the named stanza.

User Response: Verify that you are not treating a non-list stanza keyword as a list type.

2539-436   **Cannot find central manager. Unable to queue command (***command number***) to central manager.**

Explanation: The central manager machine could not be found in this daemon's configuration.

User Response: Verify that the central manager is defined in the LoadLeveler administration file, and that it, or an alternate, is running.

2539-437   **No log directory specified in the LoadL_config file for this daemon.**

Explanation: There is no log directory specified for this daemon in the LoadLeveler configuration file.

User Response: Specify a log file for this daemon in the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-438   **Attention: Cannot chdir to** *directory name***. Attempting to continue...**

Explanation: LoadLeveler cannot change to the specified log directory.

User Response: Verify the existence of the directory, and that it has the appropriate permissions.

2539-439   **No spool directory specified in the LoadL_config file.**

Explanation: The path for the local spool directory was not specified in the LoadLeveler configuration file.

User Response: Add a path for the local spool directory to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-440   **No execute directory specified in the LoadL_config file.**

Explanation: The path for the local execute directory was not specified in the LoadLeveler configuration file.

User Response: Add a path for the local execute directory to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-441   **Attention: Cannot set userid to** *uid number* **(***user name***). Attempting to continue...**

Explanation: LoadLeveler failed to set the effective user ID.

User Response: Verify that the daemon runs as root, and that the **uid** is valid.

2539-442   **Attention: Cannot set groupid to** *gid number* **(***group name***). Attempting to continue...**

Explanation: LoadLeveler failed to set the effective group ID.

User Response: Verify that the daemon runs as root, and that the **gid** is valid.

2539-443   **No history file specified in the LoadL_config file.**

Explanation: There is no history file specified in the LoadLeveler configuration file.

User Response: Add a history file to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-444   **Attention: Value specified for cm_heartbeat_interval is invalid. Default value (=** *default cm_heartbeat_interval value***) will be used.**

Explanation: The value specified for **cm_heartbeat_interval** is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for correct **cm_heartbeat_interval** settings.

2539-445   **Attention: Value specified for cm_timeout is invalid. Default value (***default cm_timeout value***) will be used.**

Explanation: The value specified for **cm_timeout** is not valid.

User Response: Refer to *LoadLeveler: Using and Administering* for the correct **cm_timeout** settings.

2539-446   **No central manager defined. Cannot continue.**

Explanation: No central manager is defined in the LoadLeveler administration file.

User Response: Define a central manager in the LoadLeveler administration file, then restart LoadLeveler.

2539-447   **LlNetProcess: Unable to instantiate LlConfig object.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-448   **Syntax error in LoadLeveler configuration files.**

Explanation: There is a syntax error in the administration or configuration files.

User Response: Verify that the syntax of the LoadLeveler configuration and administration files is valid.

2539-449   **Unable to instantiate this_machine object.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-450   **Unable to instantiate this_cluster object.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-451   **Attention: No administrator list specified in LoadL_config file.**

Explanation: There is no administrator list specified in the global LoadLeveler configuration file.

User Response: To enable administrative functions, specify an administrator list in the global LoadLeveler configuration file.

2539-452   *daemon name* **is orphaned! Exiting...**

Explanation: The specified daemon is no longer a child of the **LoadL_master** daemon.

User Response: Check the logs to diagnose the problem. Restart LoadLeveler.

2539-453   **Illegal protocol (***sender process' protocol version* **), received from another process on this machine -** *machine name* **. This daemon** *daemon name* **is running protocol version (***version* **).**

Explanation: Two daemons on this machine have different protocol versions.

User Response: Run **llctl -v** to verify the daemon and command versions. If a software upgrade is needed, then contact the LoadLeveler administrator.

2539-454   **Illegal protocol (***protocol version of sending machine* **), received from** *name of sending machine* **. This machine** *receiving machine* **is running protocol version (***version***).**

Explanation: LoadLeveler daemons on two different machines are at different protocol levels.

User Response: Run **llctl -v** to verify the daemon and command versions on all of the machines. If a software upgrade is needed, then contact the LoadLeveler administrator.

2539-455   **Attention: Allocating base Machine object.**

Explanation: LoadLeveler is allocating a generic machine, not a LoadLeveler-defined machine. This is an internal LoadLeveler error.

User Response: Contact IBM service.

2539-456   **Cannot allocate Machine object for new machine:** *machine name***.**

Explanation: The program cannot allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, contact IBM service.

2539-457   **Cannot gethostbyname for machine:** *machine name*

Explanation: The **gethostbyname()** routine returned an error for the specified machine.

User Response: Verify that the specified machine exists, that the name being used is resolvable, and that the LoadLeveler administration file contains valid machine names.

2539-458   **Unable to find or allocate Machine object for machine (***machine name or IP address***).**

Explanation: LoadLeveler failed to locate data for the specified machine.

User Response: Verify that adequate memory is available on the specified machine, and that the LoadLeveler administration file contains valid machine names.

2539-459   **Cannot gethostbyaddr for machine:** *machine name*

Explanation: The **gethostbyaddr()** routine returned an error for the specified machine.

User Response: Verify that the machine exists, that the address being used is resolvable, and that the LoadLeveler administration file contains valid machine names.

2539-460   **Cannot start thread for service** *service type* **on port** *port number***. rc =** *return code*

Explanation: LoadLeveler failed to create a thread.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-461   **Attention: Connection to** *machine name* **port** *port number* **reset. Retrying ...**

Explanation: LoadLeveler is attempting to reconnect to named machine via indicated port.

User Response: Attention message - no action.

2539-462   **Attention: Connection to** *machine name* **path** *socket path* **reset. Retrying ...**

Explanation: LoadLeveler is attempting to reconnect to named machine via indicated socket path.

User Response: Attention message - no action.

2539-463   **Cannot connect to** *machine name service name* **on port** *port number*. **errno =** *errno*

Explanation: LoadLeveler failed to connect to the specified service on the specified machine and port.

User Response: Correct the problem indicated by the error number.

2539-464   **Cannot connect to** *machine name* **path** *socket path*. **errno =** *errno*.

Explanation: LoadLeveler failed to connect to the specified machine via the specified socket path.

User Response: Correct the problem indicated by the error number.

2539-465   **Cannot receive file permissions for file** *file_name*. **errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-466   **Cannot send file size, for file** *file_name*, **errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-467   **Cannot send file characteristics for file** *file_name*. **errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-468   **sendFile: Cannot receive ready-to-receive status for file** *file_name*. **errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-469   **Receiver refuses file,** *file_name*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-470   **Cannot send file** *file_name* **to stream. errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-471   **Cannot receive file** *file_name* **from stream. errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-472   **Cannot receive file size for file** *file_name*. **errno =** *errno* (*error_description*).

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-473   **Cannot send ready-to-receive status for file** *file_name*, **errno =** *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-474   **Cannot send file buffer for** *file_name* **to stream. errno =** *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-475   **Cannot receive command from client** *machine name*, **errno =** *errno*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-476   **Got unknown command (***command value***)**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-477   **Cannot fork child process. errno =** *errno*

Explanation: The fork system call failed to fork a child process.

User Response: Correct the problem indicated by the error number.

2539-478   **Cannot change process group. errno =** *errno*

Explanation: The **setpgid** system call failed to change a process group.

User Response: Correct the problem indicated by the error number.

2539-479   **Cannot listen on port** *port number* **for service** *service name*.

Explanation: LoadLeveler cannot listen on the specified port for the specified service.

User Response: Verify that the specified service is not already running on the machine, and that the port is not already in use.

2539-480   **Cannot start main socket. errno =** *errno*

Explanation: The listen system call failed to start a socket.

User Response: Correct the problem indicated by the error number.

2539-481   **Cannot start new TransAction thread. rc =** *return code*

Explanation: LoadLeveler failed to start a thread.

User Response: Verify that sufficient memory is available, then recycle LoadLeveler. If the problem persists, then contact IBM service.

2539-482   **Cannot start new Stream Connection thread. rc =** *return code*.

Explanation: LoadLeveler failed to start a thread.

User Response: Verify that sufficient memory is available, then recycle LoadLeveler. If the problem persists, then contact IBM service.

2539-483   **Cannot perform chmod on input socket** *socket path*. **errno =** *errno*

Explanation: The **chmod** system call failed to change permissions on the specified socket path.

User Response: Verify that the socket path exists, and that the process attempting **chmod** has been authenticated.

2539-484   **Cannot start UNIX socket on path** *socket path*. **errno =** *errno*

Explanation: LoadLeveler failed to start a UNIX socket.

User Response: Correct the problem indicated by the error number.

2539-485   **Cannot start new UNIX Connection thread. rc =** *return code*.

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-486   **Cannot start new datagram Connection thread. rc =** *return code*.

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-487   **DCE authentication requested but unable to initialize Security Services. LoadLeveler is terminating. Security Services issued the following error message:** *error message*.

Explanation: A command or daemon cannot communicate with Security Services.

User Response: Verify that the security mechanism is installed on the host, and that the daemons are running.

2539-488   **The** *daemon name* **daemon must be run as root.**

Explanation: The specified daemon can only be run by the root user.

User Response: **su** to root, then run the daemon.

2539-489   **Unable to open /dev/null (errno =** *errno***) to re-direct stdin. Continuing.**

Explanation: The **open** system call failed.

User Response: Correct the problem indicated by the error number.

2539-490   **Unable to open /dev/null (errno =** *errno***) to re-direct stdout. Continuing.**

Explanation: The **open** system call failed.

User Response: Correct the problem indicated by the error number.

2539-491   **Cannot start main thread. rc =** *return code*

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-492   **Unable to set_user_euid(***uid number***)**

Explanation: LoadLeveler failed to set the effective user ID.

User Response: Verify that the daemon binary file has the appropriate permissions.

2539-493   **Unable to set_user_ruid(***uid number***)**

Explanation: LoadLeveler failed to set the real user ID.

User Response: If the problem persists, then contact the LoadLeveler administrator.

2539-494   **Unable to chdir to /tmp:** *return code***.**

Explanation: LoadLeveler failed to change to the **/tmp** directory.

User Response: Use the **strerr()**output to diagnose the problem.

2539-495   **Failed to set host_entry for machine:** *machine name***.**

Explanation: LoadLeveler encountered an error while setting host entry information for the specified machine. Problems communicating with the machine may result.

User Response: Verify that the specified machine is known to the name server; if the problem persists, then contact IBM service.

2539-496   **Machine name,** *machine***, exceeds** *number* **characters.**

Explanation: The specified machine name exceeds the maximum number of characters allowed for a host name.

User Response: Verify that the host name is valid; if necessary, update the LoadLeveler administration file.

2539-497   **Program Error:** *error message***.**

Explanation: A LoadLeveler daemon or command detected corrupted internal data.

User Response: If the problem persists, then contact IBM service.

2539-498   **Security Services error. The following error message was issued:** *error message***.**

Explanation: An error was reported by Security Services.

User Response: If DCE security is enabled for LoadLeveler, check the DCE configuration on your system. If cluster security services is enabled for LoadLeveler, check the cluster security services configuration. Correct the problem based on the information provided in the message returned by Security Services. If the problem persists, then contact IBM service.

2539-499   **Unable to obtain client credentials. Security Services issued the following error message:** *error message***.**

Explanation: Either the client or the LoadLeveler daemon has failed DCE security checks.

User Response: Make sure you have logged into DCE using the "dce_login" command before running LoadLeveler commands or APIs. If the problem persists, then contact IBM service.

2539-500   **Unable to authenticate server. Security Services issued the following error message:** *error message***.**

Explanation: A LoadLeveler daemon has failed security checks.

User Response: Check the DCE configuration on your system and correct the problem based on the information provided in the message returned by Security Services. If the problem persists, then contact IBM service.

2539-501   **Unable to authenticate client. Security Services issued the following error message:** *error message***.**

Explanation: A connection to a LoadLeveler daemon has failed security checks.

User Response: Make sure you have logged into DCE using the **dce_login** command before running LoadLeveler commands or APIs. Check the DCE configuration on your system. If the problem persists, then contact IBM service.

2539-502   **Client not authorized for transaction. Security Services issued the following error message:** *error message*.

Explanation: Command or daemon cannot successfully initiate communication with Security Services.

User Response: Make sure that the client is a member of the specified DCE group.

2539-503   **Unable to determine client identity. Security Services issued the following error message:** *error message*.

Explanation: Command or daemon cannot successfully initiate communication with Security Services.

User Response: Make sure DCE daemons are running and that the DCE server is responding. If the problem persists, contact your DCE Administrator.

2539-504   **Connection with** *daemon* **daemon was broken.**

Explanation: A LoadLeveler daemon or command detected an internal error.

User Response: If the problem persists, then contact IBM service.

2539-510   **Unable to determine authentication methods on host. This machine will be dropped from the cluster.**

Explanation: An error occurred while trying to determine the authentication methods defined on the current machine.

User Response: Check the DCE and Security Services configuration on your system. If the problem persists, then contact your DCE Administrator.

2539-511   **DCE authentication has NOT been requested, but only DCE authentication has been authorized on this host. This machine will be dropped from the cluster.**

Explanation: "Compat" authentication mode has been requested, but the current host only supports "DCE" authentication.

User Response: If the problem persists, then contact the DCE Administrator.

2539-512   *Daemon* **daemon unable to log in to DCE. Make sure that the DCE Registry has been set up to recognize LoadLeveler and that DCE keyfiles exist for the LoadLeveler daemons.**

Explanation: The specified daemon cannot log into DCE. This may mean that DCE initialization required fro LoadLeveler has not been performed.

User Response: Verify that DCE Registry setup required for LoadLeveler has been performed. Keyfiles will exist for the daemons if this has been done. If the problem persists, then contact your DCE Administrator.

2539-513   **The authentication mechanism is not available. CTSEC requires** *security_level* **or greater be installed. The machine will be dropped from the cluster.**

Explanation: When the cluster security services component of RSCT is enabled, a minimum level of the security services library is required. The machine will be dropped from the cluster.

User Response: The system administrator should be contacted to install the level of software indicated, or a higher level.

2539-515   **The LoadLeveler configuration file specifies login restriction checking (REJECT_ON_RESTRICTED_LOGIN) but the version of AIX installed does not support the LoadLeveler usage. The restriction checking will not be performed.**

Explanation: The LoadLeveler configuration file specifies login restriction checking (REJECT_ON_RESTRICTED_LOGIN), but the version of AIX installed does not support the LoadLeveler usage. Restriction checking will not be performed.

User Response: Turn off the **loginrestrictions** checking in the configuration file until the version of AIX that supports this checking for LoadLeveler has been installed.

2539-516   **An error was encountered trying to read file** *file_name*, **rc** = *return_code*, **file size** = *file_size*, **bytes read** = *bytes_read*, **errno** = *errno* (*error_description*)**.**

Explanation: An I/O error occurred attempting to read a file.

User Response: Examine the *errno* and error description. If the file is a user-specified file, correct the problem indicated by the *errno*.

2539-517   **An error was encountered trying to write file** *file_name*, **rc** = *return_code*, **file size** = *file_size*, **bytes written** = *bytes_read*, **errno** = *errno* (*error_description*)**.**

Explanation: An I/O error occurred attempting to write a file.

User Response: Examine the *errno* and error description. If the file is a user-specified file, correct the problem indicated by the *errno*.

2539-518   **Cannot receive error message from stream. errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-519   **Cannot send error message from stream. errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-520   **Cannot receive file buffer for** *file_name* **from stream. errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-521   **Cannot receive flag for file** *file_name*, **from stream. errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-522   **Cannot send flag,** *flag*, **for file** *file_name*, **to stream. errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-523   **Cannot send a 64bit file size for file** *file_name*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-524   **Cannot send file permissions for file** *file_name*. **errno** = *errno* (*error_description*)**.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-525 **The amount of bytes,** *number_of_bytes*, **read for** *file_name*, **does not match file size,** *file_size*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-526 **The following error message was received from the companion NetFile process when attempting to transmit file** *file_name*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-527 **Unexpected NetFile flag received (***flag***) when attempting to transmit file** *file_name*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-566 *command*: **Failed to route** *field* **(***specification code***) in** *location*

Explanation: An error occurred attempting to route between daemons. The problem may be a network or TCP problem, or an internal LoadLeveler problem.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-567 *object fetch function* **does not recognize specification** *field***(***specification code***)**

Explanation: CA field was requested from an object, but the field identifier is not known by the object. This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-568 *function name* **is returning a NULL element for specification** *specification name* **(***specification value***)**

Explanation: An unexpected NULL value is being returned for a specification. This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-569 **Internal Error: Specification** *specification name* **is not recognized.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-591 *internal context* **(***specification number***) not recognized by fetch()**

Explanation: LoadLeveler encountered an unrecognized data type.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-592 *internal context* **(***specification number***) not recognized by insert()**

Explanation: LoadLeveler encountered an unrecognized data type.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-593 **Cannot rename** *file name* **to** *new file name*. **Logging may be incomplete. errno =** *errno*

Explanation: The **rename** system call failed to rename the specified file to the new name with a **.old** extension.

User Response: Verify that there is enough files system space, and that the files have the appropriate permissions. Correct the problem indicated by the error number.

2539-594   **Cannot open input file** *file name* **for copy, errno =** *errno*.

Explanation: The **fopen** system call failed to open the specified file for input.

User Response: Verify the existence of the file, and that it has the appropriate permissions. Correct the problem indicated by the error number.

2539-595   **Cannot open log file** *file name*, **errno =** *errno*. **Logging will remain unchanged.**

Explanation: The **fopen** system call failed to open the specified log file.

User Response: Verify the existence of the file, and that it has the appropriate permissions. Correct the problem indicated by the error number.

2539-596   **No name specified for log file. Logging will go to stderr.**

Explanation: There is no log file name specified in the LoadLeveler configuration files for this daemon.

User Response: If you want logging to write to a specific file, then specify a log file in the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-597   **Error** *non-translated error* **line** *source line number* **file** *file name*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-599   **Job** *job number* **.***step number* **- Unable to malloc** *number of bytes* **bytes for a MACH_USAGE struct.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-600   **Unable to create string for copy of** *file name*.

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler processes. If the problem persists, then contact IBM service.

2539-601   **Incorrect status file name -** *file name*.

Explanation: This is an internal LoadLeveler error.

User Response: Drain, then recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-602   **status file,** *file name*, **already exists**

Explanation: The specified status file already exists.

User Response: None.

2539-603   **Cannot create status file,** *file name*, **errno =** *errno* [*error message*]**.**

Explanation: LoadLeveler cannot create the specified file.

User Response: Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.

2539-604   **Cannot open status file,** *file name* **, errno =** *errno* [*error message*]**.**

Explanation: LoadLeveler cannot open the specified file.

User Response: Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.

2539-605   **Cannot remove status file,** *file name* **, errno =** *error number* [*error message*]**.**

Explanation: LoadLeveler could not delete the specified file.

User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-606   **Cannot write** *number* **bytes to status file,** *filename*, **errno =** *errno* [*error message*]**.**

Explanation: LoadLeveler failed to write to the specified file.

User Response: Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space available.

2539-607   **lseek failed for status file,** *file name* **, offset =** *file offset* **, whence =** *offset usage flag* **, errno =** *errno* [*error message*]**.**

Explanation: **lseek** failed to set a file pointer.

User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-608   **Cannot remove usage file,** *file name* **, errno =** *errno* [*error message*]**.**

Explanation: LoadLeveler failed to delete the specified file.

User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-609   **Cannot open usage file** *filename* **to read. errno =** *error num***.**

Explanation: LoadLeveler cannot open the specified file.

User Response: Verify that the file has the appropriate permissions, that you have specified the correct path to the execute directory, and that there is sufficient filesystem space.

2539-610   **Cannot route dispatch usage for file** *filename***.**

Explanation: The **startd** cannot read or write accounting information to the job usage file.

User Response: Examine the specified file to determine why the **startd** is failing to read or write to it.

2539-611   **Cannot open usage file** *filename* **to write. errno =** *error num*

Explanation: LoadLeveler cannot open the specified file.

User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-612   **Cannot write dispatch usage file** *filename***.**

Explanation: LoadLeveler cannot write to the specified file.

User Response: Verify that the file has the appropriate permissions, and that you have specified the correct path to the execute directory.

2539-613   **No reservation history file specified in the LoadL_config file.**

Explanation: There is no reservation history file specified in the LoadLeveler configuration file.

User Response: Add a reservation history file to the LoadLeveler configuration file, then reconfigure LoadLeveler.

2539-614   **The command** *command* **failed with the following error message:** *error_message***.**

Explanation: A failure occurred when LoadLeveler ran the specified command.

User Response: Examine the error message to determine the appropriate action.

2539-615   **The** *command* **command must be run as root.**

Explanation: The specified command must be run from a process with a valid **root** ID.

User Response: Verify that the process running the command is running as **root**.

2539-751   *getrlimit or setrlimit* **for** *system call* **limit failed. errno =***error number [error message]***.**

Explanation: The **getrlimit** or **setrlimit** system call failed.

User Response: Consult the specified error message for more information.

2539-752   **The** *system call name* **system call failed for user** *username***. errno=***error num [error msg]***.**

Explanation: The specified system call failed.

User Response: Consult the specified error message for more information.

2539-753   **The uid for user,** *user name***, on the executing machine (***uid***) does not match uid on submitting machine (***uid***).**

Explanation: The user must have the same **uid** on both the submitting and the executing machines.

User Response: Either configure LoadLeveler to allow the user only to run on machines with the same **uid,** or change the **uid** s on machines in the LoadLeveler cluster.

2539-754   **The gid (***gid***) for user,** *user name***, on the submitting machine was not found in the group list for the user on the executing machine.**

Explanation: The user's group id on the submitting machine must also be valid group on the executing machine.

User Response: Either configure LoadLeveler to allow the user only to run on machines where the **gid** is valid, or add the **gid** to the user's group list on all of the machines in the LoadLeveler cluster.

2539-755   **The system call to set the real or effective uid to** *uid* **failed. errno=***error num [error msg]***.**

Explanation: The specified system call failed.

User Response: Consult the specified error message for more information.

2539-756   **The setregid system call failed for gid** *gid***. errno=** *error num error msg***.**

Explanation: The **setregid** system call failed.

User Response: Consult the specified error message for more information.

2539-757   *object ID* **does not have a StepVars object.**

Explanation: The specified object was asked for its global keyword value structure, but one does not exist. The object can be a **Job**, a **Step**, or a**StepList**.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-758   *object ID* **does not have a TaskVars object.**

Explanation: The specified object was asked for its global keyword value structure, but one does not exist. The object can be a: **Job**, **Step**, **StepList**, **Node**, **Task** or **TaskInstance**.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-759   *object type object num* **is not contained and cannot return StepVars.**

Explanation: The specified object was asked for its global keyword value structure, but it does not keep one locally, and it is not contained by another object that does.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-760   **Attempt to reassign Task instances to Step** *step name*.

Explanation: LoadLeveler tried to create the task instances for the specified step after machine assignments were made, but the step already had task instances. This indicates a failure in the LoadLeveler process.

User Response: Report the error to the LoadLeveler administrator.

2539-761   *object type object num* **is not contained and cannot return TaskVars.**

Explanation: The specified object was asked for its global keyword value structure, but it does not keep one locally, and it is not contained by another object that does.

User Response: Report the error to the LoadLeveler administrator, and verify that the Job in the source file is correct.

2539-762   **Failed to set AFS credentials. errno=***error num error msg*.

Explanation: LoadLeveler failed to establish AFS tokens.

User Response: Verify that AFS is installed on the executing machine, and that **llafs.shr.o** exists in the same directory which contains **LoadL_master**.

2539-763   **Unable to set DCE security credentials. Job will proceed without DCE credentials. errno=***error num* [*error msg*]**.**

Explanation: LoadLeveler failed to establish DCE credentials.

User Response: Verify that DCE is installed on the executing machine, and that the executables specified in **DCE_AUTHENTICATION_PAIR** exist. Consult the specified error message for more information.

2539-764   **Unable to import DCE context. Will continue without credentials. errno=***error num error msg*.

Explanation: LoadLeveler cannot import the DCE credentials returned by the **llsetdce** executable.

User Response: Verify that **llsetdce**, or its replacement, exists, and that it matches the interface for a LoadLeveler DCE authentication exit.

2539-765   **Unable to remove DCE credentials.**

Explanation: LoadLeveler cannot remove DCE credentials.

User Response: Monitor the DCE credential cache to see if LoadLeveler is leaving excess credentials.

2539-766   **Unable to fetch DCE credentials. DCE credentials will not be included in job submission.**

Explanation: The error message is self-explanatory.

User Response: Verify that DCE is installed, and that the **DCE_AUTHENTICATION_PAIR** keyword is set correctly in the configuration file.

2539-767   **STARTER not specified in config file.**

Explanation: The full path for the starter program must be specified in the configuration file.

User Response: Verify that the **STARTER** keyword is specified correctly in the configuration file.

2539-768   **Unable to open database for** *job queue* **job queue because: errno=***error code* **(***error description***)**

Explanation: The job queue file could not be opened.

User Response: Consult the specified error message for more information.

2539-769   *function name***: Error retrieving Job StepList from Queue. Unable to route step type.**

Explanation: The job in the job queue has been damaged, and could not be retrieved.

User Response: Contact the LoadLeveler administrator.

2539-770   *function name***: Error retrieving Job Steps from Queue.** *object type* **(***encoding of object***) is not a valid type.**

Explanation: The job in the job queue has been damaged, and could not be retrieved.

User Response: Contact the LoadLeveler administrator.

2539-771   **Invalid data type=** *data type* **in** *function name***.**

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2539-772   **Error returned from Security Services [***message***]. Processing will continue without** *security* **credentials.**

Explanation: Security Services returned an error when LoadLeveler tried to establish the user's DCE or cluster security services security credentials. LoadLeveler will attempt to run the job without security credentials.

User Response: Correct the problem indicated by the Security Services error message provided.

2539-773   **Error returned from Security Services [***message***]. The job will not be run.**

Explanation: Security Services returned an error when LoadLeveler tried to establish the user's DCE or cluster security services security credentials. LoadLeveler will not attempt to run the job.

User Response: Correct the problem indicated by the Security Services error message provided, then rerun the job.

2539-774   **Error returned by kvalid_user indicating DCE user** *DCE user name* **may not access the AIX account of user** *AIX user name***. The job will not be run.**

Explanation: The kvalid_user AIX service routine denied the DCE user access to the listed AIX user's account. When the cluster security services component of RSCT is enabled, the SP service used to verify the users security identity can access the user's account denied access.

User Response: Either add the DCE principal to the $HOME/.k5login file, or verify that the DCE principal is the same as the AIX user, then re-run the job. If the problem persists, then contact your DCE Administrator.

2539-775   **Error returned by resurok indicating user** *AIX user name* **may not access host** *AIX host name*. **The job will not be run.**

Explanation: The ruserok AIX service routine denied the AIX user access to the AIX host. Such access is allowed if the **/etc/host.equiv** and **@HOME/.rhosts** files are configured properly.

User Response: Refer to the AIX documentation on **/etc/host.equiv** and **$HOME/.rhosts** files to correct the problem, then rerun the job.

2539-778   **Invalid data type=***invalid_data_type* **in** *function*.

Explanation: This is an internal LoadLeveler error.

User Response: Recycle LoadLeveler on the affected machines. If the problem persists, contact IBM service.

2544 Error messages

2544-800   **Action Required for Reservation** *reservation_ID*.

Explanation: Subject line for mail that notifies the LoadLeveler administrators and the reservation owner when a reservation is about to start and some reserved machines are unavailable.

User Response: The body of the mail indicates which machines are unavailable and the reason why each machine is unavailable. Consult the messages referenced in the mail to determine the appropriate course of action.

2544-801   **Reservation** *reservation_ID* **(owner=***reservation_owner***) is scheduled to start at** *reservation_start_time* **and one or more reserved machines are not available for use. The following machines are not available:**

Explanation: A reservation that is about to start is unable to make use of all of the machines that it has reserved. A list of the machines that are unavailable to the reservation and the reason why each machine cannot be used follows this message in the email.

User Response: The action you need to take depends on the reason for each machine being unavailable. Consult the messages referenced in the mail to determine the appropriate course of action.

2544-802   **This machine is not in the Central Manager's machine list.**

Explanation: The specified machine is not in the LoadLeveler cluster or the machine has not yet been added to the central manager machine list. If **MACHINE_AUTHENTICATE** is set to **false** in the LoadLeveler configuration file, a machine will not be added to the central manager machine list until a LoadLeveler daemon on the machine contacts the Central Manager. Depending on update intervals in the configuration file, this could take several minutes after the central manager starts up.

User Response: If the machine is in the cluster, a LoadLeveler administrator may issue the **llctl resume** command on the absent machine to force the machine to contact the central manager immediately.

2544-803   **Startd is not running.**

Explanation: The central manager knows the machine is part of the cluster, either because it is defined in the LoadLeveler administration file or because the machine had previously contacted the central manager, but sufficient time has passed since the central manager received an update from the **startd** on the machine that central manager has determined the machine is down.

User Response: If LoadLeveler is running on the absent machine, a LoadLeveler administrator can issue the **llctl resume** command on the absent machine to force the machine to contact central manager.

2544-804   **One or more nonpreemptable steps are running.**

Explanation: One or more steps that have been made nonpreemptable by a LoadLeveler administrator are running on reserved machines and cannot be preempted to free up the reserved resources.

User Response: The nonpreemptable steps must be made preemptable by a LoadLeveler administrator and then preempted using the **llpreempt** command or they must be simply canceled, otherwise the steps will continue to use the reserved resources even after the reservation has started.

2544-805   **Startd is in flush state.**

Explanation: The LoadLeveler administrator flushed the **startd**.

User Response: A LoadLeveler administrator can issue the **llctl resume** command on the flushed machine to make the **startd** available again.

| **2544-806**   **Startd is in draining or drained state.**

| **Explanation:** The LoadLeveler administrator drained the **startd**

| **User Response:** A LoadLeveler administrator can issue the **llctl resume** command on the drained machine to make
| the **startd** available again.

| **2544-807**   **Startd is in suspend state.**

| **Explanation:** The LoadLeveler administrator suspended the **startd**.

| **User Response:** A LoadLeveler administrator can issue the **llctl resume** command on the suspended machine to
| make the **startd** available again.

| **2544-808**   **Mode Reset For Reservation** *reservation_ID*.

| **Explanation:** The subject line for mail notifying LoadLeveler administrators and the reservation owner when a
| reservation's mode has been reset after a central manager failure.

| **User Response:** The body of the mail contains details indicating what action to taken.

| **2544-809**   **Reservation** *reservation_ID* **was received from the Schedd on** *schedd_hostname* **in state** *reservation_state*
| **with mode** *previous_reservation_mode* **after a Central Manager restart. The reservation's mode has been**
| **set to** *new_reservation_mode*. **The mode can be restored to its previous value using the llchres**
| **command.**

| **Explanation:** After a central manager restart, the central manager received a reservation from the schedd whose
| mode was SHARED, REMOVE_ON_IDLE, or both. During the time following a central manager restart, the central
| manager cannot yet be aware of all machines, job steps, and reservations that were in the cluster prior to the failure.
| The reservation's mode is automatically reset to avoid the central manager making a decision to share a reservation's
| resources or remove a reservation before the central manager has all of the needed information.

| **User Response:** The mode may be restored to its previous value by a LoadLeveler administrator or by the owner of
| the reservation using the **llchres** command or the **ll_change_reservation** API.

| **2544-810**   **Reservation** *reservation_ID* **Has Been Removed.**

| **Explanation:** The subject line for mail notifying LoadLeveler administrators and the reservation owner when a
| reservation is removed by LoadLeveler.

| **User Response:** The body of the mail contains additional details.

| **2544-811**   **Reservation** *reservation_ID* **has been removed from the LoadLeveler cluster in order to resolve an**
| **internal conflict.**

| **Explanation:** The central manager has two or more reservations which claim to reserve the same resources. This can
| happen if both the central manager and a schedd fail. During the time between the central manager restart and the
| schedd becoming available, the central manager is not aware of that schedd's reservations and may grant a new
| reservation request it would not otherwise have granted. Once the central manager is aware of this conflict, the only
| way to safely continue is for the central manager to honor only one of the conflicting reservations and remove any
| others.

| **User Response:** A new reservation can be made again using the **llmkres** command or the **ll_make_reservation** API.

2544-850   **Cannot allocate storage for array of machines.**

Explanation: The program could not allocate virtual memory.

User Response: Verify that the machine has a reasonable amount of virtual memory available for the LoadLeveler
processes. If the problem persists, then contact IBM service.

2544-851   **Wall_clock_limit not specified, but is required when using this scheduler.**

Explanation: No value could be found in the job command file, or in the administration file, for **wall_clock_limit**. This limit must be specified when using this scheduler. The job step will not be run.

User Response: Specify a value for this limit in either the job command file you are submitting, or the administration file. Refer to *LoadLeveler: Using and Administering* for more information on **wall_clock_limit**.

2544-852   **The default scheduler does not support multiple tasks per node.**

Explanation: The default LoadLeveler scheduler does not support the scheduling of multiple tasks on a node, but this has been requested in the submitted job. The job step will not be run.

User Response: Use the Backfill (or some other) scheduler that supports multiple tasks per node. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-853   **The default scheduler does not support multiple adapter requirements.**

Explanation: The default LoadLeveler scheduler does not support multiple **Adapter** requirements specified in multiple **network** keywords (as in the submitted job). The job step will not be run.

User Response: Use the Backfill (or some other) scheduler that supports multiple adapter requests. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-854   **The default scheduler does not support interactive jobsteps.**

Explanation: The default LoadLeveler scheduler does not support the scheduling of interactive jobsteps. The job step will not be run.

User Response: Use the Backfill (or some other) scheduler that supports interactive job steps. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-855   **Class** *class name* **with** *number of defined initiators* **initiators defined and** *number of used initiators* **currently in use is too busy to run Step** *step id* **requiring** *number of initiators* **initiators.**

Explanation: The specified interactive job step could not be scheduled because there were not enough free initiators available.

User Response: Either increase the number of initiators, or wait until some jobsteps of this class complete, then resubmit the job.

2544-856   **User** *user name* **running** *number of steps* **steps with maximum of** *max number of steps* **when Step** *step id* **is being considered.**

Explanation: The specified user has reached the maximum number of steps allowed by the **maxjobs** keyword in the user stanza in the administration file. The jobstep will not be run.

User Response: The user can wait until some of the jobs complete, or the administrator can increase the value for the **maxjobs** keyword.

2544-857   **Group** *group name* **running** *number of steps* **steps with maximum of** *maximum steps* **when Step** *step id* **is being considered.**

Explanation: The specified group has reached the maximum number of steps allowed by the **maxjobs** keyword in the group stanza in the administration file. The step will not be run.

User Response: The user can wait until some of the group's jobs complete, or the administrator can increase the **maxjobs** keyword.

2544-858   **Class** *class name* **is busy: steps running=** *number of steps*, **max=** *maximum steps* **when Step** *step id* **is being considered.**

Explanation: The specified class has reached the maximum number of steps allowed by the **maxjobs** keyword in the class stanza in the administration file. The step will not be run.

User Response: The user can wait until some of the class's jobs complete, or the administrator can increase the **maxjobs** keyword.

2544-859   **Schedd machine** *machine name* **is running** *number of steps* **steps with maximum of** *maximum steps* **when Step** *step id* **is being considered.**

Explanation: The **schedd** has reached the maximum number of steps allowed by the **max_jobs_scheduled** keyword in the administration file's machine stanza.

User Response: The user can wait until some of the **schedd**'s jobs complete, or the administrator can increase the **max_jobs_scheduled** keyword.

2544-860   **Machine** *machine name* **in hostlist is not in the cluster when Step** *step id* **is being considered.**

Explanation: The specified machine name does not match any known machines in the cluster. The step will not be run.

User Response: Either add the specified machine to the cluster, or remove it from the hostlist, then resubmit the job.

2544-861   **Machine** *machine name* **in hostlist is unavailable when Step** *step id* **is being considered.**

Explanation: The specified machine is not available. The step will not be run.

User Response: Either wait until that machine becomes available, or remove it from the hostlist, then resubmit the job.

2544-862   **Machine** *machine name* **is running steps, Step** *step id* **asks for not shared nodes.**

Explanation: A machine in the hostlist is already busy running steps, but the step being considered is set not to share nodes with other tasks (it is specified as **not_shared)**. The step will not be run.

User Response: Either wait until the specified machine frees up, or remove the machine from the hostlist, then resubmit the job.

2544-863   **Machine** *machine name* **is busy running steps and is being used exclusively when Step** *step id* **is being considered.**

Explanation: A machine in the hostlist is already busy running steps, and has been allocated to another job exclusively. The step will not be run.

User Response: Either wait until that machine frees up, or remove it from the hostlist, then resubmit the job.

2544-864   **Machine** *machine name* **is running** *number of steps* **steps with max_starters of** *maximum steps* **when Step** *step id* **is being considered.**

Explanation: The machine has reached the maximum number of steps allowed by the **max_starters** constraint. The **max_starters** value listed in the message may be less than the value specified in the configuration file because the value was reduced to accommodate the scheduling of higher priority jobs in a future time slot. The specified step will not run.

User Response: You can wait until some of the machine's jobs complete, or the administrator can increase the **max_starters** keyword or relax **START_CLASS** constraints for **allclasses**.

2544-865   **Machine** *machine name* **in hostlist is not currently allowed to run steps when Step** *step id* **is being considered.**

Explanation: When the specified step was being considered, the specified machine was prevented from running jobs by the coding in the configuration file's execution window. The step will not be run.

User Response: Either modify the execution window for the given machine, or remove the machine from the hostlist, then try again.

2544-867   **Machine** *machine name* **does not have free adapter to run the Step** *step id***.**

Explanation: The adapter on the specified machine is in use.

User Response: Wait until the jobsteps using the adapter complete, then resubmit the job.

2544-868   **Step** *step id* **cannot be scheduled at this time because it requires resources already reserved for a higher priority step.**

Explanation: The specified step has been superseded by a higher priority step, which required some of the same resources.

User Response: Try running the jobstep again.

2544-869   **Step** *step id* **was marked "not runnable" at** *time* **due to dependency.**

Explanation: The specified step cannot run because its dependency condition evaluated to false.

User Response: Fix, or eliminate, the failing dependency condition.

2544-870   **Step** *step id* **was not considered to be run in this scheduling cycle due to its relatively low priority or because there are not enough free resources.**

Explanation: The specified step was not considered because higher priority jobs already consumed all of the available resources.

User Response: Increase the priority of the job step, or wait until higher priority job steps complete, then resubmit the job. Also, verify that you are requesting valid resources (machines, adapters, classes, and so on).

2544-871   **The default scheduler does not support task geometry function.**

Explanation: The default LoadLeveler scheduler does not support task geometry specification in the job just submitted. The job step will not be run.

User Response: Use the Backfill (or some other) scheduler that supports task geometry function. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-872   **The default scheduler does not support the blocking function.**

Explanation: The default LoadLeveler scheduler does not support the blocking specification in the recently submitted job.

User Response: Use the Backfill (or some other) scheduler that supports the blocking function. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-874   **Unable to find a common switch fabric among the machines in the hostlist.**

Explanation: LoadLeveler cannot find a switch fabric that connects all machines in the hostlist for this jobstep. The jobstep cannot be scheduled at this time.

User Response: Determine why a common fabric cannot be found, or wait until all switch fabrics are available and resubmit the job.

2544-875   **Interactive step cannot run on machine** *hostname*, **machine mode is** *machine_mode*.

Explanation: One of the machines in specified in the hostlist for the jobstep is not configured to accept interactive jobsteps. The jobstep cannot be scheduled at this time.

User Response: Change the hostlist to exclude the machine, or reconfigure the machine to accept interactive jobsteps and resubmit the job.

2544-876   **The default scheduler does not support the restart on same nodes option.**

Explanation: The default LoadLeveler scheduler does not support the **restart_on_same_nodes** specification in the recently submitted job.

User Response: Use the Backfill (or some other) scheduler that supports **restart_on_same_nodes**. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-877   **Machine** *hostname* **has** *number* **steps running. Scheduling a new step** *new_step_number* **would exceed the number of allowed steps** *maximum allowable steps*.

Explanation: With WLM enabled a single machine can only run a maximum number of steps. A new step cannot be scheduled to run.

User Response: Job will remain idle until running jobs complete.

2544-878   **The default scheduler does not support adapter requests for more than one instance.**

Explanation: The default LoadLeveler scheduler does not support adapter requests for more than one instance in the recently submitted job.

User Response: Use the Backfill (or some other) scheduler that supports the adapter requests for multiple instances. Refer to *LoadLeveler: Using and Administering* for more information on the **scheduler_type** keyword in the configuration file.

2544-879   **Machine** *machine_name* **requested by job step** *step_ID* **is not reserved by reservation** *reservation_ID*. **The job step cannot be run.**

Explanation: The job step is bound to a reservation and has requested a machine that is not in the reservation. Therefore, the reservation does not have enough resources to run the job step.

User Response: Either replace the machine with one that is in the reservation and resubmit the job, or unbind the job from the reservation so that it can run outside of the reservation.

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Glossary

A

AFS. A distributed file system that provides authentication services.

AIX. Abbreviation for Advanced Interactive Executive, IBM's licensed version of the UNIX operating system. AIX is particularly suited to support technical computing applications, including high function graphics and floating point computations.

Authentication. The process of validating the identity of a user or server.

Authorization. The process of obtaining permission to perform specific actions.

B

Berkeley Load Average. The average number of processes on the operating system's ready to run queue.

C

C. A general purpose programming language. It was formalized by ANSI standards committee for the C language (X3J11) in 1984 and by Uniforum in 1983.

client. (1) A function that requests services from a server, and makes them available to the user. (2) An address space in MVS™ that is using TCP/IP services. (3) A term used in an environment to identify a machine that uses the resources of the network.

cluster. (1) A group of processors interconnected through a high speed network that can be used for high performance computing. (2) A group of jobs submitted from the same job command file. (3) A set of machines with something in common between them. This commonality could be that they are all backed up by one machine or they are all in the LoadLeveler administration file.

Cluster 1600. See IBM @server Cluster 1600.

cluster security services. A component of RSCT that is used by RSCT applications and other RSCT components to perform authentication within peer domains.

CtSec. Cluster security services.

D

daemon. A process, not associated with a particular user, that performs system-wide functions such as administration and control of networks, execution of time-dependent activities, line printer spooling, and so on.

datagram. A protocol known as the User Datagram Protocol (UDP). It is an internet standard protocol that allows an application program on one machine to send a datagram to an application program on another machine. UDP uses the Internet Protocol to deliver datagrams. Conceptually, the important difference between UDP and IP is that UDP messages include a protocol port number, allowing the sender to distinguish among multiple destinations (application programs) on the remote machines. In practice, UDP also includes a checksum over the data being sent.

DCE. Distributed Computing Environment.

default. An alternative value, attribute, or option that is assumed when none has been specified.

DFS™. Distributed File System. A subset of the IBM Distributed Computing Environment.

H

host. A computer connected to a network, and providing an access method to that network. A host provides end-user services.

I

IBM @server Cluster 1600. An IBM @server Cluster 1600 is any PSSP or CSM-managed cluster comprised of POWER™ microprocessor based systems (including RS/6000 SMPs, RS/6000 SP nodes, and pSeries® SMPs).

IBM @server 325 and 326 servers. LoadLeveler for Linux supports the IBM @server 325 and 326 servers with 64-bit AMD Opteron processors. The supported Linux distributions are RHEL 3, RHEL 4, or SLES 9.

M

menu. A display of a list of available functions for selection by the user.

Motif. The UNIX industry's standard user interface, originally developed by the Open Systems Foundation.

Motif is based on the X-Window system and is a Presentation Manager look-alike. Motif is available for all IBM AIX workstations.

MPICH. A portable implementation of the full Message-Passing Interface (MPI) standard. MPICH was developed by Argonne National Laboratory to be highly portable and is used by a large number of providers of MPI implementations.

MPICH-GM. A port of MPICH on top of Myrinet GM code. Myrinet-GM is a low level message-passing system for Myrinet networks.

N

network. An interconnected group of nodes, lines, and terminals. A network provides the ability to transmit data to and receive data from other systems and users.

NFS. Network File System.

node. In a network, the point where one or more functional units interconnect transmission lines. A computer location defined in a network.

NQS. Network Queueing System.

O

OSI. Operating System Instance. In the LoadLeveler documentation, OSI and node are used interchangeably.

P

parameter. (1) A variable that is given a constant value for a specified application and that may denote the application. (2) An item in a menu for which the operator specifies a value or for which the system provides a value when the menu is interpreted. (3) A name in a procedure that is used to refer to an argument that is passed to the procedure. (4) A particular piece of information that a system or application program needs to process a request.

process. (1) A unique, finite course of events defined by its purpose or by its effect, achieved under defined conditions. (2) Any operation or combination of operations on data. (3) A function being performed or waiting to be performed. (4) A program in operation. For example, a daemon is a system process that is always running on the system.

peer domain. A set of nodes configured for high availability by the configuration resource manager. Such a domain has no distinguished or master node. All nodes are aware of all other nodes, and administrative commands can be issued from any node in the domain. All nodes also have a consistent view of the domain membership.

R

Reliable Scalable Cluster Technology. A set of software components that together provide a comprehensive clustering environment for AIX. RSCT is the infrastructure used by a variety of IBM products to provide clusters with improved system availability, scalability, and ease of use.

RSCT. See Reliable Scalable Cluster Technology.

RSCT peer domain. See peer domain.

S

SDR. Abbreviation for System Data Repository. A repository of system information describing SP hardware and operating characteristics.

server. (1) A function that provides services for users. A machine may run client and server processes at the same time. (2) A machine that provides resources to the network. It provides a network service, such as disk storage and file transfer, or a program that uses such a service.

shell. The shell is the primary user interface for the UNIX operating system. It serves as command language interpreter, programming language, and allows foreground and background processing. Some widely used implementations of the shell concept include Bourne, Bourne Again, C, and Korn.

stream. An internet standard transport level protocol that provides the reliable, full duplex, stream service on which many application protocols depend. TCP allows a process on one machine to send a stream of data to a process on another. It is connection-oriented in the sense that before transmitting data, participants must establish a connection. Software implementing TCP usually resides in the operating system and uses the IP protocol to transmit information across the Internet. It is possible to terminate (shut down) one direction of flow across a TCP connection, leaving a one-way (simplex) connection. The Internet protocol suite is often referred to as TCP/IP because TCP is one of the two most fundamental protocols.

System Administrator. The user who is responsible for setting up, modifying, and maintaining LoadLeveler.

U

user. Anyone who is using LoadLeveler.

W

working directory. All files without a fully qualified path name are relative to this directory.

workstation. (1) A configuration of input/output equipment at which an operator works. (2) A terminal or microcomputer, usually one that is connected to a mainframe or to a network, at which a user can perform applications.

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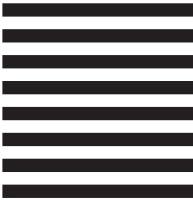Name

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